

ANNUAL MAGAZINE 2018-19

AWARDS & ACHIEVEMENTS | PUBLICATION & RESEARCH ACTIVITIES | COLLOQUIA | REVIEW-ARTICLES | POETRY CULTURAL ACTIVITIES & SPORTS | SOCIAL ACTIVITIES | EXCURSION & OUTINGS | FIELD VISITS | PHOTOGRAPHS | SKETCHES



J.D. BIRLA INSTITUTE

J.D. Birla Institute (JDBI) was established in 1962 and is a private unaided College affiliated to Jadavpur University, Kolkata since 1963. It is located in the heart of the city at 11 Lower Rawdon Street.

In acknowledgement of its continuous quest for excellence and the exemplary standards the Institute has maintained over five decades, it was awarded the highest possible grading of "A" by National Assessment and Accreditation Council (NAAC). The Institute has also been ranked high amongst Institutes of higher learning in the country by several rating agencies including India Today, The Week, Career 360, Outlook and Times Magazines.



President
Governing Body, JDBI

Welcome to J.D. Birla Institute affiliated to the prestigious Jadavpur University, Kolkata. It is indeed very heartening to witness that the college has carved out a name for itself in the world of academics both at the local and the national level. Beyond providing a sound education, we wish to provide our students a holistic learning experience for life. Our aim is to teach students to Learn, not just Study. Hence, we strive to travel beyond the boundaries of mere books. We have realized that the future is abstract and unknown, but the youth in our hands are real and can be moulded.

The contents of the Magazine reflect the amazing creativity of thoughts and imagination of our students. I extend my warm wishes to the Principal and the entire team for the successful edition of this issue and anticipate that they all continue towards their goal of excellence.

Surrangala Birla.

Mrs. Sumangala Birla President, Governing Body, JDBI

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PROFESSOR SURANJAN DAS M.A. (Cal), D.Phil (Oxon) Vice-Chancellor অখ্যাপক সুরঞ্জন দাস উপাচার্য

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> Phone: +91-33-2414-6000 (O) Fax: +91-33-2413-7121 (O)

OFFICE OF THE VICE-CHANCELLOR: AUROBINDO BHAVAN ANNEXE

I am glad to know that J.D. Birla Institute is publishing the next edition of its College Magazine - **JDBI Times** for the year 2018-19.

A College Magazine reflects the creativity and hidden talents of the institute's students. Every year I receive a copy of the college magazine from J.D. Birla Institute that reflects the holistic nature teaching - learning process of the college.

I convey my good wishes to the Principal, students, faculty and staff of the college for the endeavor to take the college to newer heights of excellence in the years to come.

I wish the College every success in all its ventures.

Sulayan Das.

Prof. (Dr.) Suranjan Das

Vice-Chancellor, Jadavpur University



Message from

Hon'ble Vice Chancellor, Jadavpur University













Brig VN Chaturvedi (Veteran) Secretary General

Mobile: 9599423988

Phone: 033 2289-0033

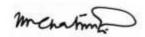
Email: secretary_general@birlahighschool.com

Vidya Mandir Society L N Birla Building 01 Moira Street Kolkata - 700 017

Nurturing creativity and inspiring innovation are two rudiments of evocative education, and a College Magazine is a perfect amalgamation of both. It harnesses the creative energies of the academic community and distils the essence of inspired imagination in the most brilliant way possible.

I am delighted to know that the Annual College Magazine, JDBI Times 2018-19 is ready for publication. I appreciate and applaud the contributions of the Principal and her team for the successful completion of this tedious yet daunting task of putting together the myriad thoughts and creativity of students and faculty into a meaningful and delightful visual fest.

I wish the students and staff of the Institute all the luck in their future endeavors. May you all soar high in uncharted skies and bring glory to the Institute.



Brig. V.N. Chaturvedi Secretary General, Vidya Mandir Society



Message from Secretary General Vidya Mandir Society

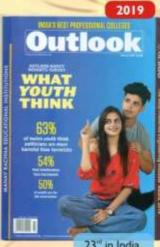


- 4" Emerging College of this Century
- 31" in India (COMMERCE)
- 2" in Kolkata (COMMERCE)

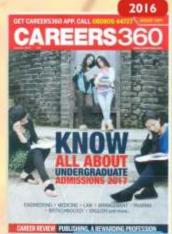


40° in India (COMMERCE) 2° in Kolkata

(COMMERCE)



23" in India (FASHION TECHNOLOGY)



6" with AAAA+ out of 50 top

Colleges in East India

2019



RULA AWARDS

"Your Passion, Our Vision"

Education Ratua Award Of the Year '2019



FOR INTERNATIONAL INNOVATION & RETTERMENT EXCELLENCE IN TECHNICAL RESEARCH.



HIGH QUALITY EDUCATIONAL INSTITUTE AWARD

Presented to

J.D.BIBLA INSTITUTE

At Grandour Hall, Hotel Groups Residency, Trichy, Tamileada, India on 25° February of 2018 powered by.

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Rn. S. ABUTHAHR Director LIRULA & RULA AWARDS







www.rulaawards.com || www.ijrula.com || www.worldresearchcouncil.org

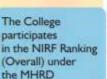
India's Outstanding & Innovative High Quality Educational Institute Awardfrom RULA (Accredited by World Research Council)



Most Friendly College Award from Bengal Rowing Club



Best Visiting College (Overall Topper at Managedia 2016) from iLead





Principal

I take immense pleasure to announce the release of the next edition of our inhouse college magazine, JDBI Times 2018-19.

J.D. Birla Institute has always emphasized on academic excellence and extracurricular performances of its students. It has set high standards for each student with regards to their academic performance and participation in co-curricular activities. Several events are organized throughout the year and students are provided an exposure to the world beyond classroom. Regular seminars, workshops and special lectures are organized to facilitate knowledge sharing by esteemed resource persons who are specialized in their respective fields of proficiency. Students are provided with an intellectually stimulating environment that empowers them to become innovative thinkers, creative solvers and inspired learners of tomorrow. They are nurtured to become responsible citizens of this great nation.

The college magazine acts as a platform for them to express individual talents and articulate students' experiences. It takes lot of patience, hard work, time, dedication and enthusiastic participation from all to realized this mammoth task. The efforts put forth by our team of students and faculty members toward publication of this issue are commendable and highly appreciated. I congratulate each one of them and the editorial board for bringing out such this issue.

I am sure the readers will enjoy reading this periodical.

Professor Deepali Singhee, Ph.D

Principal, J.D. Birla Institute (Departments of Science, Commerce & Management)
Ph.D - Jadavpur University; M.Sc - Bombay University; B.Sc - Jadavpur University



HEADS / CO-ORDINATORS OF DEPARTMENT



I welcome students to an Institute that promotes creativity, practicality and learning. We strive to offer a high level education by focusing on producing 21st century experts in the field of study.

Mrs. Samita Gupta Head (Deptt. of Textile Science, Clothing & Fashion Studies)



A touch of creativity with nimble fingers creating a world of beautiful dreams and splendid living... If Interior Design is your passion, JDBI awaits you.

Mrs. Smita Parekh Head (Deptt. of Interior Designing)



JD Birla Times is a milestone that marks our growth, unfolds our imagination and gives life to our thoughts and aspirations. It also unleashes a wide spectrum of creative skills of our students and faculty members.

Ms. Damanjeet Kaur Head (Deptt. of Food Science & Nutrition Management)



JDBI focuses on quality and excellence. We seek to prepare young students with the very best preparation for life. I would take this chance to urge young students to focus on all round development. Wishing you all the very best.

Ms. Geetika Sachdev Head (Deptt. of Human Development)



This magazine gives an insight into the JDBI as way of life, their creativity & activities. A platform to exhibit the literary skills and innovative ideas of both teachers & students.

Dr. Adrija Saha Head - Deptt. of Science (PG)



We at JDBI try to inculcate discipline among the students apart from imparting knowledge. JDBI Times is a reflection of the dedication, hard work and enthusiasm of our students.

Mr. Debjyoti Dey Coordinator (1" Year), Deptt. of Commerce



Learning is the process of constantly updating in an ever changing world. Focus on the journey, not the destination. Joy is found not only in finishing activity but also in doing it.

Ms. Mahua Pal Coordinator (2rd Year), Deptt. of Commerce



Bookish Education cannot make the students ready for the outside world, we at JDBI help the student to grow in a holistic manner and make them future ready.

Mr. Monojit Dutta Coordinator (3" Year), Deptt. of Commerce



My dear students, everyone has a talent and so do you. Let it shine out, is all you have to do. Best Wishes for your future endeavors.

Dr. Namrata Maheshwari Coordinator (M.Com)







Astha Agarwal 1" Year, M.Com

My journey with this institute started in 2015, it has always been exciting as well as

challenging all along. This institute not only gave me opportunities to explore the outside world but also helped me build a strong personality. My seniors, juniors and mentors have always been playing a great role to bring out the best in me by extending their continuous support.

I have been a part of the editorial board since the past one year, and it has provided me with all together a new experience. This experience not only enhances my knowledge but also provides for a platform to explore my potential within the boundaries of the institute.



Dikcha Jajodia 1" Year, M.Com

Among all the memories of JDBI, one of the best thing that happened to me

was being the part of College Editorial Board, the experience of which, I will always cherish.

The amazing part of the Institution is that we are always encouraged to do things creatively on our own and learn in a much better way with the guidance of our eminent faculties. I am fortunate enough to be part of this great institute in my own small little way. Thank you JDBI.



Shreejita Roy 3" year B.com (Hons), Marketing specialisation

Three years at J.D.Birla Institute has been the most exciting and enriching

phase of my life so far. Here every day I have learned new things which I shall always carry with me. Our college is more than just an educational institution. It has always focused on our holistic development by providing the students with opportunities in different areas.

I have been associated with the editorial board from its inception and have some of fond memories of it. JDBI Times is a unique platform which allows students to showcase their brilliance and bring out the best in them. My journey with the editorial board has been an enjoyable one and I would take this opportunity to thank all the members for making it even more special.



Khyati Mody 3rd Year, B.Sc (FSNM)

Little did I know on my first day at J.D. Birla Institute that it would be so hard to say a goodbye. The

college has given me memories worth a lifetime along with valuable knowledge that I will take ahead with me in all my future endeavours. From the annual picnics, our cultural fests, seminars, departmental events, educational excursion and a plethora of other amazing activities, to learning how to multitask for all our assignments and deadlines ~ it has been a journey to Remember. Being a part of the College dance team was an icing on the cake which holds a very special place in my heart. I am very grateful to our Principal, Dr. Deepali Singhee and my lovely teachers and the faculty for creating a place for the students which they can call it their "Second home". I have been very lucky to have had this wonderful journey and am proud of my Alma matter.



Meghna Agarwal 3" Year, B.Sc (TCFS)

My journey in J.D.Birla Institue has been like a roller coaster: full of twists and

turns, ups and downs. From taking part in all the inter-college fests to being a part of the core committee and organinising our own college fest, it has been a journey in itself. There were exciting moments along with stressful, anxious, nervous, frightening, and victorious moments. My college years have genuinely been surprising and a wonderful point in life where I have taken mature steps towards the future, met many friends, chose my majors, finalised my careers, and prepared for the challenges of the real world.

I am taking a lifelong of memories and learnings from this college.



Insha Dhanani 3" Year, B.Sc (HD)

When I look back 3 years ago,I realize how much I've grown. This growth wouldn't

have been possible without my Principal. Teachers and friends. I cannot thank the Institution enough for giving me so much exposure, resources, constant motivation and for helping me become the confident woman I am today. Each day spent at J.D. Birla taught me something new and now when the time has come to leave, the things I learnt in these 3 years are going to help me get through the difficult phases of life and help me work harder towards my goals.

This institution has taught me how to get through difficult times and come out stronger.

EMINENT PERSONALITIES AT OUR COLLEGE

- 1. Hon'ble Keshari Nath Tripathi, Hon. Governor of West Bengal
- 2. Hon'ble Justice Nadira Patherya, Calcutta High Court
- 3. Shri. S.C. Murmu, Regional Director, Reserve Bank of India
- 4. **Prof. Indra Nath Choudhuri,** Former Secretary of Sahitya Academy and Minister (Culture), Indian High Commission, London
- Dr. Rajendra S. Shukla (IAS), Additional Chief Secretary, Department of Higher Education (Science, Technology & Biotechnology), Government of West Bengal
- Shri. Hirdyesh Mohan (IAS), Principle Secretary, Water Resource Investigation and Development, Government of West Bengal
- 7. Shri. Harshvardan Neotia, Chairman, Ambuja Neotia Group, Kolkata
- 8. Prof. Suranjan Das, Vice Chancellor, Jadavpur University
- 9. Dr. B.S. Madhukar, Former Advisor, NAAC, Bangalore
- 10. Maj. Gen. Soumendra Dev Mahanti, Vishist Seva Medal (VSM)
- Lt. Col Mitali Madhumita, SM, recipient of Gallantry award and the Sena Medal as the first woman officer in the Indian Army
- 12. Dr. Partha Karmakar, Secretary, West Bengal Board of Secondary Education
- 13. Prof. G.V. Muralidhara, Director, ICFAI Business School, Bangalore
- CA Sonu Jain, Chairperson (Eastern Region), Institute of Chartered Accountants of India
- Prof. Pulok Mukherjee, Director, School of Natural Product Studies, Jadavpur University
- 16. Ms. Meenakshi Arvind, an avid traveler and a car enthusiast



Dr. A.P.J. Abdul Kalam, Former President of India and Shri M.K. Narayanan, Former Governor of West Bengal at the Golden Jubilee Celebrations in 2013.

FACULTY RECOGNITIONS



Prof. Deepali Singhee (Principal) received:

- The Education Ratna Award 2019 for India's Outstanding
 Academician Award by RULA Awards accredited by the World Research
 Council at a ceremony held on 26th February at Tiruchilapalli.
- Top Achiever in the Field of Education by Jain International Trade Organization (JITO) at their Foundation Day on 1" May, 2019



Mrs. Smita Parekh (Assistant Professor, & Head, ID Department) received the **Best Faculty** award from ABID (Association of Builders, & Interior Designers) on 22nd January 2019 at an event held at Science City Exhibition Grounds.



Dr. Rishiparna Guha
(Assistant Professor,
Commerce
Department) was
selected as the
Editorial Board
Member of
International Journal
of Sustainable and
Green Energy having
ISSN No. 2575-2189
and published by
Science Publishing
Group, New York USA.



Dr. Manika Das
(Assistant Professor,
FSNM Department)
was selected as the
Editorial Board
Member of Journal of
Disease and Medicinal
Plant having ISSN No.
2469-8202 and
published by Science
Publishing Group,
New York USA.



Dr. Anindita Deb Pal (Assistant Professor, FSNM Department) was invited to Chair a Technical Session at the International Conference jointly organized by Industrial Electronics & Electrical Engineers Forum and Institute of Research & Journals on 6th January 2019.



Prof. Deepali
Singhee (Principal)
was invited as
Resource Person to
conduct a Career
Orientation
programme on
'Changing Perspective
of Home Science
Education in Today's
Society by Shri.
Shikshayatan School
on 2019.

हिंदी अखबारों में बेहतर विकल्प

JEIG CE

८.02.2019 प्रभात खबर 👫

जीवन के लक्ष्य पर फोकस करें विद्यार्थी : राज्यप

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MORNING INDIA

Waste to worth: valueadded food products from fruit and vegetable wastes

affente a la fitatrere, 2018 a Microsoft [3]

जेडी बिरला के छात्रों ने बरितयाँ की दीवारों पर पेंटिंग की



The Statesman

THE ECHO OF INDIA- KOLKATA Twesday-March 5, 2019

Misc News 19

Holi: An eco-friendly approach



EGLCORRESPONDENT

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हर्बल मुलाल पर जेडी बिड़ला में कार्यशाला

बहारता. मारान्यम के जोती बिक्कण इंस्टीटपुट में प्रकृतिक रेगी पर 30

घट को कार्यशाला का आयोजन किया च्या इसका आयोजन **।** कॉलेज के टेम्मस्टाइल विकास विकास चलाचिंग ग्रंड फैजन उट होता के प्रनापस्था नार्वकर्यानी व

रंग्टीटपूट ऑफ नेचर्स करूब के साधीन किया गया, जिसमें नेंदा, अपराजित य अन्य फुली तथा मीडिकिनल प्लाट में प्रकृतिक रेगों के निर्माण के आरे में मतत्वपूर्ण महत्वकों दी गयों. इस सावेशाला में अदश्युर विश्वविद्यालय के पूर्व पति कुल्तर्वति भी मिद्धार्थ दशा में खाजी को इन रेगों के चारे में बताया डोली के समय हम रामार्थितक रेगी का प्रतीम करते हैं जो पूरी तथा से शारित व स्वास्थ्य के लिए शिलकारक हैं जाबीक हमेल रेग में किसी तथा की समस्या नहीं होती है. इस कार्यशाला का उदेश्य प्रकृतिक तरीके से रंगों के निर्माण के बारे में जनकारी प्रदेश करना च.

The Telegraph



The department of human develope institute (main campus), organised J.D. Sirla institute presents "Balance for Better — a silent walk", in association with The Teiggraph, on March 8 to celebrate International Women's Day. The wells was flagged off by chief guest Meenakshi Arvind, who has travelled 24 countries in 70 days. "We have organised this silent walk to raise awareness on the issue of women's empowerment and gender equality. Since the theme of this year's International Women's Day is Balance for Setter, we hope that one day we will witness a society that will benefit from equal opportunities presented to both man and women," said Deepall Singhee (neel), principal of the Institute. The walk took place from Hospital Road, near Fort William (South Gate), to Lower Rawdon Street and had participants from various colleges, like ILEAD, Shri Shikshayatan College, The Bhawanipur Education Society College and Loreto College.

HE TIMES OF INDIA



Students take part in Khadi revival programme





खादी को बढ़ावा देने के लिए पहल

क्षीतकार, पार्ट राजरेंगे के जिए छाईए कीए का लिए है. हो फैरन है प्रदेश कर बहुत्व दिश्व का सकता है। तेरहे विकास हंग्टीबहुद के विकारियेट अर्थेय टेम्बट्या बद्धा, अर्थित दर वैजन स्ट्यांज भी ओ हे अर्थीका प्रदर्शने का उद्यापन करते हुए तंतुम के निदेशक ती। यह बनाब ने वे क्यों बार्स. जे हैं किएण इंटरोपहूर भी और में आसीता हुए उदानि में बंधका के पार्टी भी और हें क्षते हैं भी में जनवार को प्रशान पाने एक प्रांतिन का में इसाल किया गाँउ इसके अंगान चार्च के उन्होंन को बहुत्ता देने के लिए खर्च एका रीज किए पर पाएक कर भी प्रेमा किए पर, पूर्वी अनाम मुत्ती के को हें अराजवात विवर्धात करने के लिए वैकार को बी पूछ संबद्धा के आरों हुए अवोर्डिक फिल्ह एक. जिसके प्रमुख में मानीपुत्र के लेकर फैला के नहीं। उनेते में खारों के उपनेप को दिखानन पन था, इस असार पर एक खारी को लेका एक उत्तर करिया प्राथेको इतिहाँचेत् यो आहेरिया किछ गाउ हुए कर्माक्रम के अन्य प्राथम्य अतिहारी में बाग समझ के देखाडूहाए नेहास्त के पूर्व क्षेत्र के प्रकार अधिकारों हो रोपेश मनदार, रक्षायें उत्सवस बोर्ड के पूर्व के के उन निर्देश के बहुएकों तथ राज बार्ड की के उन निर्देश के बेर्ड राजित है, इस कार्यक्रम में इंजिस कार्य के संस्थापक राजित हुईजा ने खार्ड से विभिन्न होनेन प्रत्यातें को प्रतीने किया.

प्रभात खबर

महिलाओं को पूर्ण रूप से आत्मनिर्भर होने की आवश्यकता : प्रो डॉ सैकत मैत्र







्राणीका पेजान कहा चैठिएँ प्रत्योक्ता कर ज्यापन करते हुए। स्टब्स् रिक्ट रिक्टी, तर्वा के ज्यापका गार्विक सीतः, अतुर्विद्वार के अस्तव वह संदेश प्रदेशी तथा जेड़ी विश्वन प्रतीक्तून की स्टब्सिक हो, विश्वनी

The Statesman

THURSDAY, 28 MARCH 2019



Women empowerment

Birla Internation Day with much enthusiasm Over 4 students 450 along with teachers and staff under



staff undertook ± 5.5
km walk from hospital road to the college campus at Lower Rawdon Street. Students
from neighbouring colleges like The Loreto College. ILeud, The Bhawanipure Education Society College, Shri Shikahayatan College and NGOs like Ankur Kala. Tollygunge
Women in Need and Yeh Mera India also participated, A number of men were as
seen walking along side in support of these young women. On an occasion commemorating,
such a power packed theme, no other than a car enthusiast and the lady who drove
26.800 km covering 24 countries in 70 days (indicating 70 years of Independence) India; defying all odds would have been suitable to flag off the walk. An enthralling
inter-departmental debate on the prospects of the future being a gender-balanced
world involving participation of students and teachers marked the day and justified
the theme.

The Statesman

The Statesman 16

Sustainable style



Held in Swabburni Raix Marsch, the Beld in Swothumsi Baix Masch, the show was presented by the final-year students from the departments of tea-tile iciency children and fashion. The fashion show presented collections on "Revival of the lost ginry." Metammphisis." Bincaranties, "In purent of nature," where recycled denim said 1-shirts, bio-cutton and many more were used to unweil the fashion. In the presented of the diginisaries, the students received assaude for their achievements at the end. The fund raised in the event was to be owned for impering English Language skills of undergriteleged stodens.

The Telegraph





STUDENTS SHOWED O















The Telegraph

HAPPY B'DAY

CAMPUS

AVE WAS ALL ABOUT FRESHIDEAS

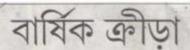


The Telegraph

PLAY OF IDEAS AT COMMERCIO CONCLAVE 2018







मन करता दावा करता आपनारे अक शार्षिक जीवा सहिरमानिकार गी। স্টেডিয়ামে মেতে উঠেছিলেন। তথু জিটি বিভাগ ইনস্টিটিউটৰ ভাৰত্ববীৰা নয় সংগ্ৰ হিচান শিক্ষক শিক্ষিকা সহ অন্যানাত। এই প্ৰতিযোগিতত উচ্চাকী অনুষ্ঠানে উপস্থিত ছিলেন লোকটেনাাওঁ কলেন ফিবলৈ হবুমিতা ও ড. অগতন



हिट्याल मोक्नकाली मकत राष्ट्रकरामी तिरूप व्यक्ति विराज्य स्मीताव राम বিসেবে পারপারাক্তা নাজর কেরেনের নির্মান কারণে হিসেবে কোন্দ্রের এক ন্মায়িঃ 13- কল বুলু বা পদ পিতার পাব পরিক্রমার করণ নির্মাহিল। এই প্রতিযোগিকার বিভিন্ন বিষয়ে প্রতিযোগিকের ভিন্নেয় বিশেষভাবে নাজরে এসেরে: বিশেষ করে বৌদ্ধ লক আছে নি, তা কে, প্রার্ট অফ সৌত্ত ও একলো নিজর পৌত্রে শিক্তবংগরুর লাকণভাবে কোন্দ্রে পার্ট্যের। প্রতিযোগিকার পোরে ভূলের অঞ্চল ক. নিশালী নির্টিম আরম্ভরীকরে বলু পঞ্চাশ্যনক আয়া আরমেনি হবে পারীর রক্ষার কল ক্রীকার প্রতিক আগ্রহী হতে হবে।

The Telegraph

CAMPUS

NOSTALGIA AND GOODBYE MARKS J.D. BIRLA INSTITUTE ALUMNI MEET 2019, WITH t2

















STUDENT'S GENERAL ELECTION, 2018



General Election for the Student's Administrative Body and Council 2018 was held on 29th August 2018 at the college campus and all students and faculty members actively participated.

Elected Student's Administrative Body (2018-2019) - Deptts. of Science		
Head Girl	Dimple Dalal (Dept. of FSNM)	
Class Representative	Mehak Kaushal (FN), Rachita Mandhana (TC)	
PG (2nd Year)	Jyoti Shah (HD)	
Class Representative	Harshita Mody (FN), Avriti Dassani (TC)	
PG (15t Year)	Abiha Islam (HD)	
Class Representative PGDDAN	Tahira Rabab	
Class Representative	Vandana Rajiv (Dept. of FSNM), Meghna Agarwal (Dept. of TCFS)	
UG (3rd Year)	Maliha Haider (Dept. of ID), Simran Kaur (Dept. of HD)	
Class Representative	Neha Pandey (Dept. of FSNM), Preksha Shah (Dept. of TCFS)	
UG (2 nd Year)	Mani Rathi (Dept. of ID), Stuti Gupta (Dept. of HD)	
Class Representative UG (1St Year)	Falah Ismail (Dept. of FSNM), Shaheen Perveen (Dept. of TCFS) Prishita Anarwal (Dept. of ID), Priva Sharma (Dept. of HD)	





Head Girl	Shaina Sultan (3rd Year, Section-A1)	
Class Representative PG (2nd Year)	Surbhi Jain	
Class Representative PG (1 St Year)	Khushboo Bajaj	
Class Representative UG (3rd Year)	Sayani Sen (Accountancy & Finance-I) Pooja Agarwal (Accountancy & Finance-II) Varsha Agarwal (Marketing) Diksha Agarwal (Human Resource)	
Class Representative UG (2nd Year)	Harsha Agarwal (SecA), Vanshika Agarwal (SecB), Shruti Sahu (SecC), Manshi Goel (SecD), Ishika Jalan (Sec	
Class Representative UG (1 St Year)	Renu Kothari (SecA), Shruti Tibrewal (SecB), Diksha Dudhani (SecC), Shabari V.N.Sah (SecD), Meghna Agarwal (SecE)	

Elected Student's Council Body (2018-2019)		
Dimple Dalal	Head Girl (Science) B.Sc. (FSNM)	
Shaina Sultan	Head Girl (Commerce) B.Com. (HR)	
Prishita Agarwal	Class Representative 1st Year B.Sc. (ID)	
Preksha Shah	Class Representative 2nd Year B.Sc. (TCFS)	
Vandana Rajiv	Class Representative 3rd Year B.Sc. (FSNM)	
Harshita Mody	Class Representative 1st Year M.Sc. (FN)	
Tahira Rabab	Class Representative PGDDAN	
Diksha Dudhani	Class Representative 1st Year B.Com. (C)	
Harsha Agarwal	Class Representative 2nd Year B.Com. (A)	
Varsha Agarwal	Class Representative 3rd Year B.Com (Marketing)	
Surbhi Jain	Class Representative 2nd Year M.Com.	

ANNUAL CONVOCATION



The 4th Annual Convocation was held on 7th February 2019. Shri. Keshari Nath Tripathi, Hon. Governor of West Bengal graced the ceremony as the Chief Guest. Eminent dignitaries from the University attended the event.



Shri Keshari Nath Tripathi, Hon. Governor of West Bengal



Prof. Suranjan Das VC, Jadavpur University



Dr. Gayathri Vasudevan Co-Founder & CEO, LabourNet Services India Pvt. Ltd.

Four hundred & twenty two students from the Science, Commerce and Management departments (Batch 2015-2018 for UG / 2016-2018 for PG) received their degrees. Ten students received the University Gold Medal for their outstanding performance. Six silver medals with a 24 carat gold medallion were also given for the first time by the College to the UG toppers (overall) of the Institute.



Gold Medals Awarded by the University

Name of Student	Department
Ms. Arpita Jain	M.Sc in Food & Nutrition
Ms. Shreya Binani	M.Sc in Human Development
Ms. Ipsita Ghosh Dastidar	M.Com
Ms. Anwesha Tripathi	M.Com
Ms. Mahima Lalwani	B.Sc (Hons.) in Food Science & Nutrition Management
Ms. Darshana Tikmani	B.Sc (Hons.) in Textile Science, Clothing & Fashion Studies
Ms. Jhanvi Sheth	B.Sc (Hons.) in Interior Designing
Ms. Sonam Goenka	B.Sc (Hons.) in Human Development
Ms. Shikha Pandey	B.Com (Hons.)
Ms. Aayushi Bhartia	BBA



Gold Medals Awarded by the J.D. Birla Institute

Name of Student	Department	
Ms. Mahima Lalwani	B.Sc. (Hons.) in Food Science & Nutrition Management	
Ms. Darshana Tikmani	B.Sc. (Hons.) in Textile Science, Clothing & Fashion Studies	
Ms. Jhanvi Sheth	B.Sc. (Hons.) in Interior Designing	
Ms. Sonam Goenka	B.Sc. (Hons.) in Human Development	
Ms. Shikha Pandey	B.Com. (Hons.) with specialization in Marketing	
Ms. Aayushi Bhartia	BBA with specialization in Finance	





Financial Scholarships Awarded by the College for Outstanding Academic Performance

Semester-V (Session 2018-2019)

Department of FSNM: Ms. Manya Kaushal
Department of TCFS: Ms. Amatullah Lucky
Department of ID: Ms. Maliha Halder

Department of HD: Ms. Attiya Ali

Department of Commerce: Ms. Tanuka Agarwal

Semester-VI (Session 2018-2019)

Department of FSNM: Ms. Khyati Mody
Department of TCFS: Ms. Amatullah Lucky
Department of ID: Ms. Maliha Halder

Department of HD: Ms. Shifa Khan

Department of Commerce: Ms. Tanuka Agarwal

LIST OF TOPPERS

Department of FOOD SCIENCE NUTRITION MANAGEMENT

Name of the Students	Toppers
Ms. Vashni Kandru	1" Year (Sem. I & II) B.Sc (Hons.)
Ms. Manya Kaushal	2 ^{nl} Year (Sem. III & IV) B.Sc (Hons.)
Ms. Mahima Lalwani	3 rd Year (Sem. V & VI) B.Sc (Hons.)
Ms. Nandini Rohtagi	1" Year (Sem. I & II) M.Sc in Food & Nutrition
Ms. Ashna Singhal	2 ^{nl} Year (Sem. III & IV) M.Sc in Food & Nutrition
Overall Performance	
Ms. Mahima Lalwani	3 st Year (Sem. I to VI) B.Sc (Hons.)
Ms. Arpita Jain	2 st Year (Sem. I to IV) M.Sc in Food & Nutrition

Department of

TEXTILE SCIENCE, CLOTHING & FASHION STUDIES

Name of the Students	Toppers
Ms. Anjana S. Nair	1" Year (Sem. I & II) B.Sc (Hons.)
Ms. Amatullah Lucky	2 rd Year (Sem. III & IV) B.Sc (Hons.)
Ms. Darshana Tikmani	3 ^{rt} Year (Sem. V & VI) B.Sc (Hons.)
Ms. Shramana Mullick	1" Year (Sem. 1 & II) M.Sc in Textiles & Clothing
Ms. Shreya Binani	2 rd Year (Sem. III & IV) M.Sc in Textiles & Clothing
Overall Performance	The state of the s
Ms. Darshana Tikmani	3" Year (Sem. I to VI) B.Sc (Hons.)
Ms. Shreya Binani	2 st Year (Sem. I to IV) M.Sc in Textiles & Clothing

Department of INTERIOR DESIGNING

Name of the Students	Toppers	
Ms. Rukmini Rudra	1" Year (Sem. 1 & II) B.Sc (Hons.)	
Ms. Maliha Halder	2 rd Year (Sem. III & IV) B.Sc (Hons.)	
Ms. Jumana Rampurawala	3 rd Year (Sem. V & VI) B.Sc (Hons.)	
Overall Performance		
Ms. Jhanvi Sheth	3 rd Year (Sem. I to VI) B.Sc (Hons.)	

Post-Graduate Diploma in Dietetics & Applied Nutrition

Name of the Students	Toppers
Ms. Mrittika Bhowmik	1" Year (Sem. I & II)

Department of HUMAN DEVELOPMENT

Name of the Students	Toppers
Ms. Prachi Baid	1" Year (Sem. I & II) B.Sc (Hons.)
Ms. Saanchi Baid	2 rd Year (Sem. III & IV) B.Sc (Hons.)
Ms. Sonam Goenka	3rd Year (Sem. V & VI) B.Sc (Hons.)
Ms. Vidisha Sheth	1" Year (Sem. I & II) M.Sc in Human Development
Ms. Shamim Fatma	2 ^{sd} Year (Sem. III & IV) M.Sc in Human Development
Overall Performance	
Ms. Sonam Goenka	3 rd Year (Sem. I to VI) B.Sc (Hons.)
Ms. Ipsita Ghosh Dastidar	2 st Year (Sem. I to IV) M.Sc in Human Development

Department of COMMERCE

Name of the Students	Toppers
Ms. Nidhi Bohra	1" Year (Sem. I & II) B.Com (Hons.)
Ms. Debrupa Banerjee	2 nd Year (Sem. III & IV) B.Com (Hons.)
Ms. Anushka Kyal	3rd Year (Sem. V & VI) B.Com (Hons.) with Spl. in Accounting and Finance
Ms. Shikha Pandey	3 rd Year (Sem. V & VI) B.Com (Hons.) with Spl. in Marketing
Ms. Honey Kumari	3 rd Year (Sem. V & VI) B.Com (Hons.) with Spl. in Human Resource Managemen
Ms. Tanushree Shah	1" Year (Sem. I & II) M.Com
Ms. Anwesha Tripathi	2 nd Year (Sem. III & IV) M.Com with Spl. in Accounting & Finance
Ms. Geetika Ahuja	2 rd Year (Sem. III & IV) M.Com with Spl. in Marketing
Overall Performance	-1
Ms. Yogeshwari Kothari	3 rd Year (Sem. I to VI) B.Com (Hons.) with Spl. in Accounting & Finance
Ms. Shikha Pandey	3rd Year (Sem. I to VI) B.Com (Hons.) with Spl. in Marketing
Ms. Dipna Maity	3 rd Year (Sem. I to VI) B.Com (Hons.) with Spl. in Human Resource Management
Ms. Anwesha Tripathi	2 ^{nt} Year (Sem. I to IV) M.Com with Spl. in Accounting & Finance
Ms. Geetika Ahuja	2 st Year (Sem. I to IV) M.Com with Spl. in Marketing

Montessori Training

Name of the Students	Toppers
Ms. Sonal Jaiswal	1" Year (Sem. I & II)

OTHER ACHIEVEMENTS



1

2nd year M.Sc. (FN) student, Ms. Arpita Jain won the Ind position for her research poster at the National Seminar organized by the Nutrition Society of India on 15th September 2018.



2

2nd year M.Sc. (FN) student, Ms. Astha Jain, won the 3nd position for her research poster at the National Seminar organized by the Nutrition Society of India on 15th September 2018.



3

I" year Commerce students won I" position in Business Plan at Elevator 2018 - The Idea Expo organized by Entrepreneurship Development Cell of St. Xavier's College on 3" & 4" October 2018. The awards included a trophy, certificate, cash prize of Rs. 10,00 and a sponsored trip to Bangkok apart from financial sponsorship by 8 investors for their business plan.



4

Students from the Departments of Commerce participated in Comquest - 2018, an annual fest organized by Lady Shri Ram College, New Delhi on 4° & 5° October 2018 and won 1° position in Biz Laurete and 2° positions in Strategem and Courtroom Survivor.



5

3[™] year ID students, Ms. Maliha Haider & Ms. Shabnoor Siraj received the **Student Recognition Award** from ABID (Association of Builders, & Interior Designers) on 22[™] January 2019.



6

Students from Science & Commerce departments also won the Most Friendly College and Best Dressed Girls College awards at the BRC Inter-college Rowing Championship 2019 on 2rd February 2019.



7

B.Com student stood 3rd in the 5 km run of the women's category (18 to 55 years age) at the Intercity Run organized by the Sports Authority of India on 3rd March 2019.



8

I" year FSNM student, Ms. Aamna Qaiser won a prize for the **Best Walk at the Fbb Fashion Show** organized by Fashion at Big Bazaar on 19" March 2019.

TEACHER'S DAY CELEBRATION

Teacher's Day was celebrated by the College Management at Vidya Mandir Auditorium on 14th September 2018. Faculty members were awarded for the performance and contribution towards the betterment of the college.

■ Best Overall Performance for the Academic Session 2017-2018



Ms. Damanjeet Kaur Deptt. of Food Science & Nutrition Management



Dr. Namrata Maheshwari Deptt. of Commerce

Outstanding Achievement in the Field of Education / Publishing of Papers in Reputed Journals for the Academic Session 2017-2018



Dr. Shweta Tuteja Deptt. of Textile Science, Clothing & Fashion Studies



Dr. Adrija Sarkar Deptt. of Food Science & Nutrition Management



Dr. Rishiparna Guha Deptts. of Science



Dr. Manika Das Deptt. of Food Science & Nutrition Management



Ms. Debolina Chatterjee Deptt. of Human Development

2-DAY WORKSHOP ON RESEARCH METHODOLOGY



Prof. Snehamanju Basu, Registrar, Jadavpur University graced the occasion as the Chief Guest

2-day workshop on Research Methodology was organized for all faculty members on 26th & 27th December 2018 under the Faculty Development Programme.

The eminent resource persons were invited to conduct different session.

- Project Writing & Research Paper Writing:
 Prof. Pulok Mukherjee, Director, School of Natural Product Studies, Jadavpur University and recipient of Outstanding Service Award from Drug Information Association, USA and TATA innovation fellowship, by Department of Biotechnology and Govt. of India.
- Scholastic Online Resources for Research: Prof. Parthasarathy Mukhophadhyay, Professor & HoD, Deptt of Library & Information Science, University of Kalyani
- Intellectual Property Rights: Dr. V.
 Tyagarajan, Founder, Ropan Sciences,
 Bangalore
- Research Methodology: Prof. Gautam Bandyopadhyay, Associate Professor of Management Studies, National Institute of Technology, Durgapur



Prof. Pulok Mukherjee



Prof. Parthasarathy Mukhophadhyay



Dr. V. Tyagarajan



Prof. Gautam Bandyopadhyay

2-DAY WORKSHOP ON CASE WRITING & CASE ANALYSIS

2-day workshop on Case Writing & Case Analysis was organized for all faculty members on 28th & 29th December 2018 under the Faculty Development Programme.

Prof. Shekhar Chaudhuri, Former Director, IIM-Kolkata and Former Dean of the Vinod Gupta School of Management, IIT-Kharagpur graced the occasion as the Chief Guest.





Prof. G.V. Muralidhara, Director, ICFAI Business School, Bangalore conducted the workshop and deliberated upon nuances of case teaching and analyzes of a case and writing case reports.



FACULTY & STAFF TEAM BUILDING EXCURSION



A Team Building Excursion was undertaken by faculty & administrative staff from 4th December to 7th December 2018 to Chalsa, (North Bengal). Twenty seven faculty members & eight administrative staff members including the Principal participated. Several team building games were organized and were conducted by Mr. Divyak Doshi from M/s. Champaklal & Bros.











WORKSHOP ON CAREER ADVANCEMENT SCHEME

There are opportunities for advancement in the teaching profession. In order to appraise teachers on the new regulations and the scoring format related to the Career Advancement Scheme as of the UGC, the workshop was conducted.

In June, 2018, the then Human Resource and Development Minister of India, Prakash Javadekar

announced new rules and regulations for college and university teachers regarding their hiring, promotion and related matters.

The University Grants Commission (UGC) introduced the API in 2010, requiring all faculty members at central universities and about 100-odd colleges directly funded by the Centre to carry out research and publish in order to benefit from the CAS, apart from also teaching and executing administrative duties. But what API effectively did was drive college teachers to publish in fake journals to advance their careers.



A simplified teacher evaluation grading system for promotion under the CAS was thus needed. For university/post-graduate teachers, the evaluations should be more research-oriented; while for college teachers there should be more focus on teaching.

The simplified teacher evaluation grading system does not make research optional for college teachers nor does it introduce community work. College teachers will continue to be evaluated on their research performance, though perhaps to a lesser degree than earlier.

Three of the more important set of reforms introduced by the government apropos hiring and promotion of faculty in the new system are as follows:

- The performance-based appraisal system (PBAS), in turn based on the academic performance indicators (API), has been removed. Instead, there will be a new simplified teacher evaluation grading system with research score added for faculty at universities and at post-graduate departments
- Promotion criteria under the Career Advancement Scheme (CAS) for university teachers has been made more research-oriented and, for college teachers, more focused on teaching
- A PhD has been made mandatory for promotion to assistant professor (selection grade) in colleges from July 1, 2021. PhDs will be mandatory for direct recruitment to assistant professorship in universities with effect from the same date.





Dr. Priya Shukla (Assistant Professor, HD Department) presented a paper, Study on relationship between emotional intelligence and achievement motivation of undergraduate students at a two-day International Seminar on 'Reflections of Childhood and Adolescence in Literature, Culture & Psychology' organized by the Department of Education, West Bengal State University in collaboration with Department of Education, Ramkrishna Sarda Mission Vivekananda Vidyabhavan & Byanjanbarna Foundation on 26th & 27th July 2018.



Ms. Damanjeet Kaur (Assistant Professor & HOD, FSNM Department) presented a poster, To assess the nutritional knowledge, attitude and practice level of meal providers in schools and orphanages through pre and post intervention design at the 50th Annual International Conference on 'India's Transition from Food Security to Nutrition Security' organized by the Nutrition Society of India at National Institute of Nutrition (NIN), Hyderabad on 15th to 17th November 2018.



Ms. Mayuri Das Biswas (Head Librarian) presented a paper, *Tagorean concept of library and open distance learning: relevance in present era* in the IASLIC 28th National Seminar 2018 on LIS Education in India: Present Scenario & Future Strategies organized by Visva Bharati Library Network in collaboration with Raja Rammohun Roy Library Foundation (RRRLF), Kolkata from 27th November to 29th November 2018 at Visva Bharati, Santiniketan.



Dr. Anindita Deb Pal (Assistant Professor, FSNM Department) presented a paper, Food safety of organic rice sold in the markets of Kolkata at the National Conference on Advances in Science, Agriculture, Environmental & Biotechnology organized by the Institute of Research & Journals at Hotel Lindsay, Kolkata on 20th January, 2019.



Dr. Manika Das (Assistant Professor, FSNM Department) presented a paper, Antifungal and antibacterial property of Guava (psidium guajava) leaf extract: Role of phytochemicals at the International Conference on Recent Advances on Informatics, Communication, Management, Health and Applied Sciences (RAICMHAS 2019) organized by Brainware University, Barasat, Kolkata from 2nd February to 4th February 2019.



Mrs. Ishita Biswas (Assistant Professor, ID Department) presented a research poster, Perception of unmarried girls towards aspects of marriage at a National Seminar on Population Dynamics in India & its implications on Health & Environment organized by International Institute for Population Sciences in collaboration with National Institute of Rural Development and Panchayat Raj, Hyderabad from 7-9th of March, 2019.

Prof. Deepali Singhee, Principal was invited for the following events:



TAAZA TV conducted an Interview of Principal on 31" January 2019 under a series of their programme, Pehchaan.



Conducted NAAC assessment for VET 1" Grade College, Bengaluru (Karnataka) from 19th to 20th February 2019



Invited as a Review Committee Member by the Central Board of Secondary Education (CBSE), New Delhi to review of Home Science textbook for Class XI & XII on 3rd June 2019.



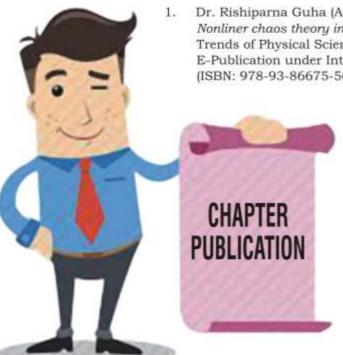
PAPER PUBLICATION

Twenty-three papers were published by faculty and librarian during the academic session 2018-2019.

- Mr. Sandip Das (Librarian): Correlation between altmetric indicator and citation on in vitro fertilization (IVF) in Journal of Indian Library Association, 54 (5), July to September 2018, p 111-117 (ISSN No 2277-5145, e-ISSN 2456-513X)
- Mr. Sandip Das (Librarian): Challenging the internet, the predator of libraries in Library Philosophy & Practice (e-journal), Vol-Annual, 2018, p 111-117, (ISSN No 1522-0222)
- Dr. Rishiparna Guha (Assistant Professor, Commerce Department): Implementation of efficient environmental management system for sustainable innovation in a food industry in Techno International Journal of Health, Engineering, Management and Science, 2 (4), September 2018, p 154-157, (ISSN 2581-4257)
- Mr. Sandip Das (Librarian): Transcending the digital divide; empowering public library websites with Indic support in Journal No-41162, College Libraries, 33 (III-IV), Year 2018 (Sept-Dec), p 20-26 (ISSN No. 0972-1975).
- Ms. Jincy Abraham (Assistant Professor, FSNM Department): Study on the efficacy of aloe vera gel blended with xanthan gum gel in enhancing the shelf life of guava in Universal Review, 7 (11), November 2018, p 195-199 (ISSN No 2277-2723; Impact Factor: 5.7).
- Dr. Shweta Tuteja Rakshit (Assistant Professor, TCFS Department): A study on the effect of sewing thread count and stitch density on the seam performance of denim fabric in Research Review-International Journal of Multidisciplinary, 3 (11), November 2018, p 34-39 (e-ISSN No 2455-3085; Impact Factor: 5.214)
- Dr. Anindita Deb Pal (Assistant Professor, FSNM Department): Adulteration in commonly used cooking oils of Kolkata: evaluation of consumer perception and detection of adulterants in International Journal of Health Sciences and Research, 8 (12), November 2018, p 30-37, (ISSN No 2249-9571, Impact Factor: 3.56)
- Ms. Sweata Rani Rai (Assistant Professor, FSNM Department): A study on the acceptability of plantbased milk and curd among the lactose people residing in Kolkata in International Journal of Health Sciences and Research, 8 (1), December 2018, p 38-43 (ISSN No 2249-9571, Impact Factor: 3.56)
- Ms. Sudeshna Pramanik (Assistant Professor, FSNM Department): Development and nutritional assessment of gluten free mathri fortified with spirulina platensis in Journal Universal Review, 7 (12), December 2018, p 816-821 (ISSN No 2277-2723, Impact Factor: 5.7)
- Dr. Adrija Sarkar (Assistant Professor, FSNM Department): Development of health functional wine produced from Emblica officinalis and Phyllanthus nituri and a comparative study of them over commercial wine in International Journal of Ferment Food, 7 (2), December 2018, p 119-124 (ISSN No: 2319-3549)
- Dr. Anindita Deb Pal (Assistant Professor, FSNM Department): Evaluation of microbial safety of organic and conventionally grown rice in International Journal of Health Sciences & Research, 9 (1), January 2019, p 158-164, (ISSN No 2249-9571, Impact Factor: 3.56)
- Ms. V. Sujitha (Assistant Professor, TCFS Department): A study on anti-microbial activity of selected medicinal plants to finish non-woven for the application of feminine hygiene products in International Journal of Scientific Research and Reviews, 8 (1), Jan-March 2019,p 460-466, (ISSN No: 2279-0543; Impact Factor: 6.946)
- Ms. Sudeshna Pramanik (Assistant Professor, FSNM Department): A study to analyse the impact of food and nutritional labelling of packaged food products on the purchasing behaviour of consumers (college goers aged 18-22 years) in Kolkata in International Journal of Scientific Research & Reviews, 8 (1), January-March 2019, p 1059-1068 (ISSN No 2279-0543, Impact Factor: 1.536).
- Ms. Sweata Rani Rai (Assistant Professor, FSNM Department): A study to assess the nutritional status
 of institutionalized and home care -elderly male people (aged >60 years) using Mini-nutritional
 assessment (MNA) in certain parts of Kolkata in International Journal of Family & Home Science,
 15 (1), Jan-April 2019, p 49-56 (ISSN No: 0973-2608; Impact Factor: 2.6985)

- Ms. Geetika Sachdeva (Assistant Professor, HD Department): Attitude of select pre-renal and postrenal transplant patients towards quality of life and anxiety in Research Journal of Social Sciences, 10 (2), February 2019, p 117-124, (ISSN NO: 0025-1348 (P), 2456-1356 (O), Impact Factor: 5.25)
- Dr. Manika Das (Assistant Professor, FSNM Department): Antifungal and antibacterial property of guava (Psidium guajava) leaf extract: Role of phytochemicals in International Journal of Health Sciences & Research, 9 (3), February 2019, p 39-45, (ISSN NO: 2249-9571, Impact Factor: 3.56)
- Dr. Anindita Deb Pal (Assistant Professor, FSNM Department): Role of sugar in gall bladder carcinoma - A Review in International Journal of Health Sciences & Research, 9 (3), March 2019, p 306-314, (ISSN NO: 2249-9571, Impact Factor: 3.56)
- Dr. Shweta Tuteja Rakshit (Assistant Professor, TCFS Department): Influence of Stitch Density and Sewing Thread Count on the Seam Performance of Denim Fabric in **Journal of the Textile** Association, 78 (6), March-April 2019, 442-448 (ISSN No: 0368-4636; Impact Factor: 0.78-RG)
- Dr. Anindita Deb Pal (Assistant Professor, FSNM Department): Microbial analysis of water bodies near food industries in International Journal of Scientific Research in Biological Sciences, 6 (2), April 2019, p 151-155, (E ISSN NO: 2347-7520, Impact Factor: 1.013)
- Dr. Manika Das (Assistant Professor, FSNM Department): Bamboo: Inherent source of nutrition and medicine in Journal of Pharmacognosy and Phytochemistry, 8 (2), April 2019, p 1338-1344, (ISSN No: 2349-8234, Impact Factor: 5.52)
- Dr. Manika Das (Assistant Professor, FSNM Department): The Study of Prebiotic Potential of Peanuts and Pistachios: The Stimulatory Effect on Lactobacillus growth in Journal of Pharmacognosy and Phytochemistry, 8 (3), June 2019, 2404-07 (ISSN No: 2349-8234; Impact Factor: 5.52-RGIF)
- Dr. Rishiparna Guha (Assistant Professor, Science Department): Role of Non-Structural Measures in the Strategic Disaster management with Special Emphasis on Disaster Insurance in Review of Research, 8 (8), June 2019, 1-5 (ISSN No: 2249-894X; Impact Factor: 5.7631-UIF)

Faculty members published the following chapters in books:



- Dr. Rishiparna Guha (Assistant Professor, Commerce Department): Application of Nonliner chaos theory in prediction of Atmospheric Systems in a book, Emerging Trends of Physical Sciences-Education & Research published by Ideal International E-Publication under International Science Community Association, Vol-1, p 62-65, (ISBN: 978-93-86675-56-9).
 - Dr. Manika Das (Assistant Professor, FSNM Department): Chlorella - The most exciting nutritional discovery on planet earth in a book, Advances in Nutrition published by Akinik Publication, New Delhi, Vol-1, pg 1-16, 2018 (ISBN: 978-93-5335-017-8).
 - Dr. Rishiparna Guha (Assistant Professor, Commerce Department): The seasonal variability of zero degree isotherm height over eastern coast of India, in a book, Emerging Trends of Physical Sciences-Education & Research published by Ideal International E-Publication under International Science Community Association, Vol-1, Edition-1, p 62-65, (ISBN: 978-93-86675-56-9).

INTERNSHIP



Department of Food Science & Nutrition Management

The purpose of industrial training / internship is to provide real world experience that will enable students to apply their learning into action. Such training helps students to gain skills required for future jobs and augments their learning experience.



Every Life Matter



















































Department of Textile Science, Clothing & Fashion Studies

Final year students of the department intern at leading garment export houses, retail chains, fashion houses, textile design organizations, dyeing and printing units and textile mills across the country to gain expertise in varied fields such as merchandising, visual merchandising, fashion and textile designing, online fashion blogging, quality control and other allied areas.







































U. M. Exports













Department of Interior Designing

Six weeks internship is a part of the course curriculum which is organized by the college for final year students where they train at reputed Interior Designing firms within and outside the city. During the training students learn through practical exposure and get an opportunity to interact with leading spearheads of this industry.































Live in Design



Studio WB







Department of Human Development

Students undertake internship in the final year of their study to get hands on experience in the professional area of their choice. They intern at organizations with a focus on dealing with special children or pre-school children and in the field of counseling at NGOs.













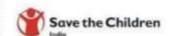
















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Nandini Rohatgi (M.Sc in Food & Nutrition) Academic Writer Absas Solutions Pvt. Ltd. CTC: Rs. 1,92,000/- per annum (plus performance incentives)



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Ashra Saman Khalid
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(plus performance incentives)



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FINE'SSE

Design Studio



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Diploma in Business Management course)

Riya Shah



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AUTOGRAM









Service Delivery Center



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Conferences / Seminars / Workshops Attended by Faculty Members



Ms. Jincy Abraham (Assistant Professor, FSNM Department) attended 2-Day National Conference, Food Sure 2018 organized by Loyola College at Chennai on World Food Day on the theme, One Future Zero Hunger on 27°-28° September 2018.



Prof. Deepali Singhee, Principal was invited to attend Faculty Knowledge Sharing Programme for Principals of UG colleges across the Country organized by ICFAI Business School at Hyderabad from 16th to 18th November, 2018.



Prof. Deepali Singhee (Principal, JDBI) & Mrs. Samita Gupta (Assistant Professor & HOD, TCFS Department) attended a Seminar on Fashion Forecast Spring/Summer 2020 & Autumn/Winter 2020-2021 organized by Apparel Export Promotion Council (AEPC) in association with WGSN on 9th April 2019.



Ms. Damanjeet Kaur (Assistant Professor & HOD, FSNM Department) attended a workshop on Modern Cakes conducted by Divya Saraf, Owner, Quartre Plate on 29th April 2019.



Ms. Sudeshna Pramanik, Ms. Jincy Abraham, Ms. Sweata Rani Rai & Ms. Divya K Mehta (Assistant Professors, FSNM Department) attended the Annual Conference, Nutrimeet, 2018 organized by The Indian Dietetic Association (Bengal Chapter) on the theme, Nutritional Therapy-Present Scenario and Future Perspective on 2nd December 2018.



Mrs. Smita Parekh (Assistant Professor & HOD, ID Department) & Mrs. Basudha Mukhopadhyay (Assistant Professor, Commerce Department) attended two-Day National Seminar on Gender Equality and Sustainable Development organized by Dept. of Home Science, University of Calcutta in collaboration with Internal Complaints Committee on 27° & 28° March 2019.



Prof. Deepali Singhee (Principal), Ms. Damanjeet Kaur (Assistant Professor & HOD, FSNM Department) & Mr. Debjyoti Dey (Assistant Professor, Commerce Department) attended the 4" edition of CII School Excellence Conclave: Evolve to Solve: Reforming Schools for Tomorrow organized by Confederation of India Industry (CII) at Radisson Hotel, Kolkata on 24" November, 2018.







MICROPLASTICS:

A THREAT TO HUMAN LIFE

Shrayasi Bhowal

2" Year M.Sc. in Food & Nutrition

Brushing with toothpaste in the morning, drinking bottled water or use of cosmetics are routine activities and a part of our daily lives. Some 350 million tons of plastic are produced worldwide every year, and the number is rising. Every 60 seconds, people around the world purchase 1 million plastic bottles and 2 million plastic bottles and 2 million plastic bags. It is estimated that by the end of 2018 we will produce enough bubble wrap that can encircle the equator 10 times.

Continuous increase in the production of synthetic plastics and poor plastic waste management has further led to a remarkable increase of plastics in our aqueous environment. Reports on plastics litter in the oceans in the early 1970s drew minimal attention of the scientific community. But recent reports on the unexpectedly high incidence of plastic debris in the North Pacific gyre have defined the subject as a highpriority research area in marine biology. A particular concern is

the occurrence of plastic debris that is not visible to the naked eye and commonly referred to as micro-plastics in the world's oceans. According to United Nation Environment Programme, micro-plastics have dimensions ranging from a few µm to 500 µm and are those plastics less than 5 millimetres in size.

These small particles are used in several products such as exfoliates in cosmetics and even in table salt. The microbeads used in cosmetic products are less than 1 millimetre in size. A study conducted by Toxic Links in March 2018 confirmed presence of micro-plastics 50 per cent of the facewash products and 67 per cent of the facial scrubs commonly found in the Indian market. More than 30 per cent toothpaste products were found to contain micro-plastics. The microplastics used in toothpaste can get stuck in the gum and trap bacteria leading to gingivitis. Over a period of

time that infection can also move from the gum into the bone holding the teeth and resulting into bleeding from gums.





Microplastic

Trophic

The primary health concerns with respect to micro-plastics are directed towards the toxic and carcinogenic chemicals used to prepare them. For example, vinyl chloride, the monomer used to manufacture PVC is a known carcinogen and exposure to it can cause angiosarcoma of the liver among factory workers.

Micro-plastics can act as carriers transferring compounds from the environment to organisms. The presence of micro-plastics in foodstuffs can potentially increase the direct exposure of plastic associated chemicals to human and may become a risk to human health. It has been established that micro-plastic can be transferred from one tropic level to another and possesses detrimental implications of bioaccumulation and bio-magnification. There are ways through which these small particles can get into the human body.



Following oral ingestion, the 'persorption' of plastic particles as large as 150 µm, through the tips of the villi, takes place. This may in turn interfere with programmed cell death and pathways of cellular breakdown of pathogens. Recently it has been proposed that these micro particles enter the bloodstream from the gut through the M cells, and from there through the lymphatic system they enter the liver and the gall bladder. They are then re-released into the gut along with the bile. In this way these micro particles, instead of getting excreted from the body, are recirculated. To make matters worse, laboratory trials have shown that organisms with a range of feeding

organisms with a range of feeding strategies are capable of ingesting and accumulating microscopic particles. More work is now required to determine the potential toxicological consequences of this new form of contamination.

Hence the menace of micro-plastics is gigantic and much need to be done fast to protect humans from its dangers.

> There are certain regulations in western countries which strictly control the amount of micro-plastics in products such as toothpaste. These regulations include

Skin irritation Cardiovascular Digestive problems Reproductive effects

Respiratory

problems

disease

Cancer

Microbead-Free Waters Act of 2015; Save Our Seas Act of 2018; Environmental Protection (Microbeads) (England) Regulations 2017 and Trash-Free Waters initiative in 2013.



The Ocean Cleanup Additionally, Computer modelling done by The Ocean Cleanup, a Netherlands foundation, has suggested that collecting devices placed near the coasts could remove about 31% of the micro-plastics in the area. In addition, some bacteria have also been evolved to eat plastic, and some

bacteria species have been genetically modified to eat (certain types of) plastics.

Although, India is yet to come up with the concrete regulation on micro-plastics, it has taken its first step. India's efforts to curb plastic pollution have impressed the United Nations enough to choose

India as the host country for World Environment Day 2018. From banning of plastic in Maharashtra to Afroz Shah's Versova beach clean-up, plastic pollution is being fought at various levels, by state governments, NGOs and individuals across India.



Afroz Shah at Versova Beach





PLASMA ACTIVATED WATER (PAW)

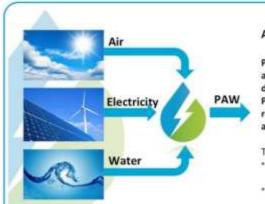
Tasnim Murtaza Zakir

2nd Year M.Sc. in Food & Nutrition

lasma is the fourth stage of matter which is created when electric energy is added to gas. If adequate energy is provided, a molecular gas will gradually detach into an atomic gas as a result of collisions between those particles whose thermal kinetic energy increases the molecular binding energy. At suitable and elevated temperatures the atoms possess enough kinetic energy to overcome the binding energy of their outermost orbital electrons, and an ionized gas or plasma will result.

When normal water is treated with air plasma, it obtains a unique disinfectant property due to acidification and that can last for a long time. The pH can be decreased from 7 to 3.2 after 10 min of activation. This water is known as the 'Plasma Activated Water' (PAW).

The oxidation-reduction (redox) process is considered to be the important factor that affects microbial inactivation, damaging the cell membrane of microbes and through this their defense mechanism. When water treated with electrically generated atmospheric plasma discharge is applied to the target (microorganism), the reactive oxygen and nitrogen species along with hydrogen peroxides present in plasma treated water forms pores on the



A Cradle to Cradle Water based solution...

Plasma Activated Water is formed out of water, air and electricity. This process is performed by nature during a thunderstorm. The unique properties of Plasma Activated Water is reduced over time and the reactive elements fall back to its original states: air and water.

The water can be used as:

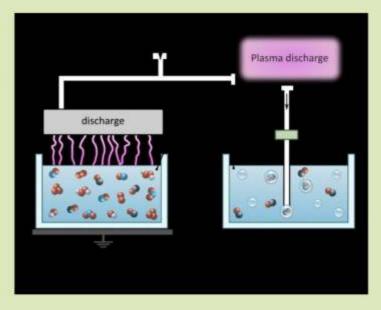
- A short term strong disinfector (for about 15 minutes)
- · A mid term nutrient with unique properties

And after that it's just water.

microbial cell membrane and causes lipid per oxidation. The chemical species then penetrate the microbial cell and damage the intracellular redox of the microorganism and affect pH homeostasis. Of all the reactive oxygen species formed in plasma activated water, hydrogen peroxide is mainly involved in the redox reactions which helps to destroy the micro-organism. Reactive Oxygen and Nitrogen Species (RONS) that are generated in water upon plasma exposure are thought to be the key components in plasma activated water that destroy bacterial and cancer cells.

PAW is bacteriostatic against a number of microorganisms. Its proposed high level of effectiveness in killing bacteria has earned it the nickname 'water of death'. Plasma activated water has a good shelf-life with a reported retention of its anti-bacterial activity from days to weeks to even years.

Plasma has been widely considered an effective agent for surface decontamination and is increasingly used for disinfection of medical equipment. Recently it has been found that treatment of water with cold gas plasma introduces exciting new properties that are beneficial for a range of high impact applications - from direct treatment of food for improving its shelf-life to decontamination of food processing equipment and even improved germination of seeds. Exposure of foods to plasma gas species or washing them with plasma treated water can significantly extend the shelf life of foods.



PAW is also used to improve plant growth. Generation of nitrates by capturing atmospheric nitrogen/nitrogen gas and converting them into other reactive radicals through plasma activation can serve as an alternate source of nitrogen for plant growth.

PAW produced by a high impulse current is effective in removing by-products of chlorine disinfection from water and can serve as a substitute for drinkable water. Plasma activated water can also be used for waste water treatments, sterilization and other chemical processes.

Plasma activated water treatment is an emerging and a promising technology which can prove to be a viable alternative to current methods, which have shown to have a devastating ecological impact.





TREATING DIABETES WITH THE LATEST **SUPERFOODS**

Tahira Rabab **PGDDAN**

iabetes, a condition caused by the body's inability to regulate insulin levels and which can lead to tissue damage and organ failure has become the country's fastest growing disease burden over 16 years to 2016. The World Health Organization estimates that the number of patients with diabetes will exceed to 360 million by 2030.

India currently represents 49 percent of the world's diabetes burden, with an estimated 72 million cases in 2017, a figure expected to almost double to 134 million by 2025. Diabetes prevalence has increased by 64 percent across India over the quarter-century, according to a November 2017 report by

DIABETES

Diabetes is a condition in which the amount of glucose (sugar) in the blood cannot use properly. We get glucose from starchy foods in our diet such as pasta, bread and cakes.



TYPE 1

usually appears first in children and adolescents, but can occur in older people, too. The immune system attacks the pancreatic beta cells and it no longer produce insulin.

is more likely to appear as people age, but many children are now starting to develop it. In this type, the pancreas produces insulin, but the body cannot used it effectively.





EXTREME TIREDNESS



ERFOUENT URINATION



INCREASED THIRST



CONSTANT HUNGER



NUMBNESS OF LIMBS

TREATMENT











425 MILLION PEOPLE IN THE WORLD SUFFER FROM DIABETES







the Indian Council for Medical Research, Institute for Health Metrics and Evaluation and the Public Health Foundation of India.

Diabetes mellitus (DM) is a serious metabolic disorder which results when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin that it produces or can also result as an effect of hormonal changes during pregnancy and is respectively classified into Type-1, Type 2 and Gestational diabetes.

Diabetes develops when glucose can't enter the body's cells to be used as fuel. This happens because either:

Type 1 diabetes there is no key (insulin) to unlock the door to the cells



Or, in the case of Type 2 diabetes. the key (insulin) is unable to unlock the door properly

and/or

the key (insulin) doesn't work properly

Treatment methods of diabetes include diet therapy, exercise therapy together with pharmacotherapy. Many researchers are actively conducting studies to develop substances from natural materials and food ingredients that can reduce blood glucose due to the toxic effects of medical interventions. With the advancement of modern science, active compounds and antioxidants have been indentified in a number of plants, fruits and vegetables that are known to cure various diseases including diabetes. Some novel superfoods having anti-diabetic properties are mentioned below:



Death to Diabetes: 10 so called healthy food that must be avoided











The Insulin Plant (Costus igneus Nak)

Fiery Costus, a native of South and Central America, is a medicinal plant that is believed to cure diabetes. Leaves of this herbal plant help to build up insulin levels by strengthening the beta cells of the pancreas,

the organ that produces insulin in the human body. Hence it is popularly known as the "Insulin" plant in India. Corosolic acid in the plant is the active ingredient that improves sensitivity of insulin receptors in the body cells and prevents hyperglycemia. A lot of research work has been carried out to evaluate the antidiabetic effect of this Insulin plant and consumption of either one fresh



Insulin Plant-

A Magic Cure For Diabetes

leaf or one teaspoon of shade-dried powder



every day have effectively produced glycemic control in diabetic patients. Besides, the plant also has various pharmacological activities and is proven to be hypolipidemic, diuretic, anti-oxidant, anti-microbial and anticancerous

Black Garlic (Allium sativum L.)

Garlic has been known to have health benefits for centuries. Evidences from several investigations have shown that garlic has anti-bacterial, anti-carcinogenic, antidiabetic and hypolipidemic properties.

Black garlic (BG) is obtained from fresh garlic that has

been fermented for a period of three weeks at a controlled temperature (70-80°C) and humidity (80-90%). When compared with fresh garlic, black garlic does not release a strong offensive odour owing to the reduced content

of allicin present in the latter.

Fermentation turns garlic cloves dark, gives them a sweet taste, and alters their consistency to chewy and jelly-like. The duration of fermentation varies depending on cultures, manufacturers and purposes.

The changes in physicochemical properties during fermentation are the main reasons for enhanced bioactivity of BG compared with fresh garlic. Several studies have reported that BG extract posses several properties and is anti-oxidant, anti-allergic, anti-diabetes, anti-inflammatory and anti-carcinogenic. S-Allylcysteine (SAC), a strong anti-oxidant, produced in large amounts during the aging process of garlic is the key compound responsible for inhibiting the free radical formation in diabetes thereby lowering the oxidative stress caused during diabetes.

Black garlic has long been consumed in South Korea, Japan and Thailand for centuries. It was introduced in Taiwan and other countries about 10 years ago. Due to its pleasant taste it can be used as a seasoning for various dishes and in the form of gel capsules for treatment of diabetes. In the past few years BG has been used by high-end chefs to flavor chicken, fish, soup and risotto.

Edible Cactus (Opuntia ficus-indica)

Prickly pear cactus also known as Nopal is a plant of the cactus family, grown throughout Mexico and South America. The pads of the plant also known as nopales are eaten as a vegetable and are sold fresh, canned or dried. While most cacti are inedible, the Opuntia species has much to offer and according to Food Agriculture & Organization (FAO) should be included in the diet. In Mexico, USA,

Spain, Italy and northern Africa, cactus forms an important part of the people's dietary menu. With excellent quality and flavour, the young leaves serve as nutritious vegetable and salad while the immature fruits are used for making mockgherkins.

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Nopales have long been used in traditional Mexican medicine for treating diabetes and there is some preliminary clinical evidence to support its benefit. Single doses of nopal have been shown to decrease blood glucose levels by 17% to 46% in some patients.

The blood glucose-lowering effect of prickly pear is attributed to its high fibrous polysaccharide and pectin content which makes nopal have a low glycemic index due to the presence of different compounds that include soluble (mucilage and pectin) and insoluble (hemicellulose, cellulose, and lignin), polyphenols, vitamin C and water. Foods with low glycemic index tend to release glucose slowly and steadily into the blood circulation. This helps in keeping blood glucose under control.





A2 MILK

Surbhi Bhartia PGDDAN

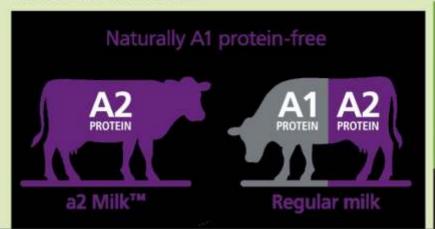
ilk has long been seen as a healthy drink, because it contains many nutrients. Recently, a new type of cow's milk, called A2 milk, has come into view in the dairy industry and has garnered attention of both the consumers and scientists. In 2000, a scientist in New Zealand founded the A2 Milk Company. This company provides milk from cows that only produce the A2 protein. Promoters of A2 milk believe that the milk is it is easier to digest and absorb than other types of milk.

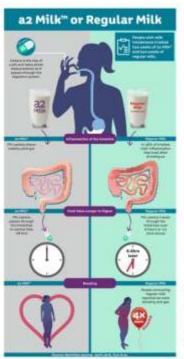
Cow's milk is a rich source of protein and there are essentially two kinds of milk protein. 80% of the milk protein constitutes of casein and the remaining is known as whey protein. Most cows' milk today contains a mix of both A1 and A2 proteins, which are two variants of the

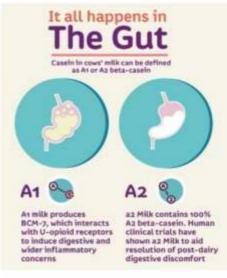
Beta casein that comprises of a chain of 229 amino acids. Cows who produce this protein in their milk with a proline at number 67 are called A2 cows, and are older breeds of cows



According to literature, more than 10000 years ago, and before cows were domesticated, they produced only the A2 beta casein protein and not the A1 beta casein protein. However, some 8000 years ago a natural single-gene mutation, both natural & due to human intervention, in this proline amino acid and began







Cows that have this mutated beta-casein are called A1 cows, and include breeds like Holsteins.

It is said that when

A1 protein is digested in the small intestine, it produces a peptide called beta-casomorphin-7 (BCM-7). The intestines absorb BCM-7 after which it then enters the blood. Researchers have linked BCM-7 to stomach discomfort and symptoms like gas, bloating and ts digestion and produces

diarrhea, uneasiness that is similar to those experienced by people with lactose intolerance. However, some researchers also believe that it is BCM-7 and not lactose that affects digestion and produces symptoms similar to lactose intolerance in some people.

Supporters of A2 milk claim that the structure of A2 protein is more comparable to human breast milk, as well as milk from goats, sheep and buffalo. Milk with A2 protein, is known to have several health benefits like preventing obesity among children and adults, improving brain functions, promoting digestion and increasing production of breast milk in nursing mothers. A2 cow milk nourishes the body tissues and acts as a natural aphrodisiac. It rejuvenates and increases life expectancy, while improving intelligence and body strength.



Studies by the National Bureau of Animal Genetic Resources (NBAGR), Karnal, India covering 22 desi breeds have established that predominant genotype in India's native cattle is A2, confirming that lude Amul Deshi,



our indigenous cows and buffaloes produce A2 milk. In the recent past, several dairy units in India (local units and some organized players) have started offering A2 milk at a premium price to consumers. Some Indian A2 milk brands include Amul Deshi, Desigo, Haritas and GoShrushti. "The Good Cow Company", situated in Dhulagarh, West Bengal, is a first-of-its-kind in the State, which has superior farm-tohome milk service for A2 milk. Their farm is equipped with the finest international technology that conforms to international dairy practices for feeding, milking and processing of milk.

Due to lack of conclusive scientific evidence related to ill-effects of A1/BCM-7 on human health, and predominance of A2 milk in Indian cattle, some researchers advocate that there is no need for consumers to switch to milk that is branded as A2.







Desigo



-Fresh - Organic
-A2 Milk

Go Srushti

Haritas

BENEFITS OF A2 MILK

By drinking A2 milk, one is no longer exposed to BCM-7 found in A1 milk, which has been linked to:



- NEUROLOGICAL IMPAIRMENT
- TYPE 1 DIABETES
- · IMPAIRED IMMUNE RESPONSE
- AUTOIMMUNE DISEASE
- HEART DISEASE



The milk fat content is on average 4.8%, higher than normal milk which is usually around 3.6%. This is healthy fat because it is naturally occurring and supports our cell structures.

Note: Rather than being homogenzied the cream remains on top.

BENEFITS OF LOW HEAT PASTURIZATION

The low heat pasteurization process preserves beneficial nutrients and bacteria in the milk.

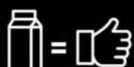




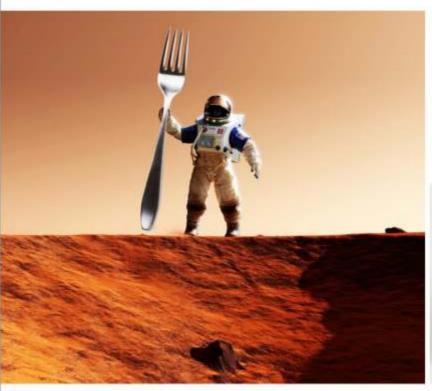




MORE BETA CAROTENE = LOWER CHOLESTEROL



Has also been shown to be more easily digested and is comparable to goat's milk and mother's milk. Could potentially be digested by those who are considered lactose intolerant.





MICRO GRAVITY DIET

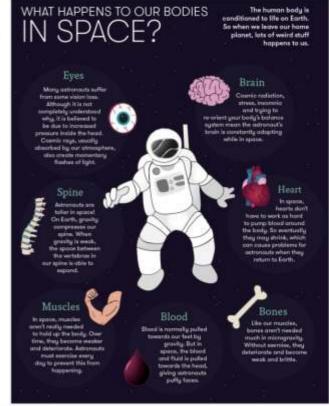
Vashni Kandru

2nd Year B.Sc. (Food Science & Nutrition Management)

Zero gravity is a condition in which there is an absence of gravitational force acting on any object including human body and thus leads to the sensation of weightlessness'. However, the effect of the earth's gravity is not completely cut off and so the environment in space is known as micro gravity. With the advancement of technology, the

major countries of the world like USA. Canada, Russia and Japan, in the year 2000 launched the International Space Station which is a habitation satellite located 408 km above the surface of the earth and moves with a speed of 107 km/sec. It has an accommodation for 6 astronauts who can stay there and carry on their research.

The space environment has been found to be unsuitable for human beings as there is absence of oxygen, water and an ozone layer thus the environment often becomes very hostile for the astronauts to reside. The altered gravity mainly affects the human body both physiologically and psychologically.



Space flight is associated with many physiological changes, as a result of the microgravity environment, including space motion sickness, congestion, altered taste and smell, shift in body fluids, vision impairment and upliftment of the brain in the skull, decrease in the size of the heart, bone demineralization and decrease in the muscle mass. The environment of the spacecraft (including the spacecraft cabin, radiation, lack of ultraviolet light exposure, carbon dioxide exposure, and the spacesuit atmosphere) can affect nutrition and nutritional requirements for long-duration missions. To help the astronauts to combat these effects of absence of gravity, the diet of the astronauts are modified.

The space food is planned and manufactured at the Johnson Space Food Centre, Huston.



The menu is planned 8 months prior to the mission. The astronauts are usually allowed to plan the initial menu by choosing the food items from the baseline food list provided by the health administrators. Later the menu designed by the astronauts is sent for dietary analysis and the changes are made accordingly and a 6 to 10 days cyclic menu is planned.



The International Space Station (ISS) food system provides a menu with a cycle of 8-16 days. Food items are supplied by all of the International partner space agencies (CSA - Canadian Space Agency; ESA-European Space Agency; JAXA - Japanese Aerospace Exploration Agency; Russian Space Agency; and NASA - US National Aeronautics and Space Administration), with the majority of items from the latter two.

Foods are packaged in single-serving containers and are intermediate moisture foods, or are in natural form, thermo-stabilized, dehydrated, or irradiated. A

standard menu is developed for the International Space Station (ISS) missions and is periodically reassessed based on food item additions and deletions. Thus the food provided is especially designed by dietitians as to provide adequate amount of macro and micro nutrients.



The ISS menu

provides 50% of calories as carbohydrate, 17% as protein, and 31% as fat. The energy requirements of astronauts are the same as that of people on earth. The astronauts thus follow the WHO recommendation for energy intake. On space shuttle flights, the busy schedule often limits the time available to consume a regular meal. Space motion sickness may result in loss of appetite, particularly in the first few days of flight. Disruptions in circadian rhythms and changed taste perceptions may lead to low energy intake.

Recommended fluid intake is about 2,000 milliliters (2 liters) per day, which is sufficient to prevent dehydration and kidney stone formation. Fluid intakes have varied from 1,000 to 4,000 milliliters per day, indicating that some crew members get less than the recommended amount. The calcium and antioxidant levels are increased in the diet to maintain the bone health and reduce oxidative stress respectively in their diet. Similarly, in space the sodium and iron levels of astronauts shoot up and so the levels of these micronutrients are reduced in the diet to avoid toxicity.

Vitamin D supplements (800 IU per day) are provided to the crewmembers, as the space shuttles are made in such a manner as to prevent the ultraviolet rays from getting inside the shuttle as they can prove to be toxic because of the absence of ozone layer. Therefore due to lack of exposure to the sun, astronauts often suffer from vitamin D deficiency.

The space food is divided into three parts namely:

- Daily menu: This includes breakfast, lunch, dinner and snacks.
- Safe haven food: This includes food for emergencies like in cases where the space flight is unable to return to earth due to various reasons like weather and technical issues, it can provide for 22 days and also provides 2000 Kcal per person;
- Extra vehicular foods are given to astronauts immediately after they perform extravehicular activity (EVA) like space walks. This food provides 500 Kcal of energy and 3 ounces of fluid.

Space foods are of different types depending upon the preservation technique used to prepare them like thermo-stabilized foods, rehydratable foods and drinks, intermediate moisture foods and condiments in solution forms like liquid pepper and liquid salt.

Natural forms of food are also taken but should be consumed within few days. Food items like breads, chips are not taken to space because they are crumbly in nature and may disperse in the environment causing damage to the equipments and may enter the eyes and nose of astronauts. The shelf life of space food ranges from 9 months to 1 year.

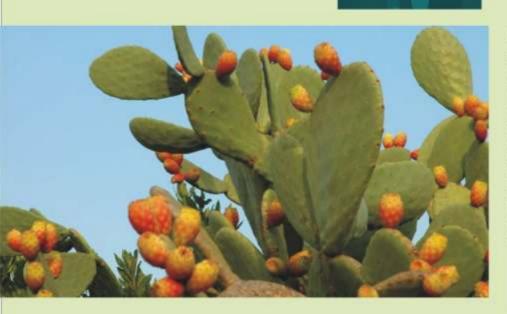
Foods packaged in rehydratable containers include soups like chicken consommé and cream of mushroom, casseroles like macaroni and cheese and chicken and rice. Some irradiated meat items are also available for space shuttle crews. Foods such as nuts,

granola bars and cookies are classified as natural form foods as they are ready to eat. Condiments include commercially packaged individual pouches of ketchup, mustard, mayonnaise, taco sauce and hot pepper sauce. Polyethylene dropper bottles contain bulk supplies of liquid pepper and liquid salt. The pepper is suspended in oil and the salt is dissolved in water. Beverages come in powdered form and include coffee, tea, apple cider, orange juice and lemonade.



The major objective of various space agencies is to send astronauts to Mars which is a 5 year long trip. This trip is possible only if enough food can be sent along with the astronauts to suffice their needs. For the Mars mission to be held in 2030, the space food should have shelf life of at least 5 years and also should provide enough nutrients for survival in space.





EDIBLE CACTUS

Ramsha Akhtar

2st Year B.Sc. (Food Science & Nutrition Management) "Climate change and the increasing risks of droughts are strong reasons to upgrade the humble cactus to the status of an essential crop in many areas," said Hans Dreyer, Director of FAO's Plant Production and Protection Division.

Edible cactus or Cactus pear should be considered as a valuable asset, especially for food and livestock feed in dryland areas. The Food & Agricultural Organization (FAO) gathered experts on the hardy plant to pool their knowledge in a bid to help farmers and policy makers make more strategic and efficient use of a natural resource too often taken for granted. During the recent intense drought, cactus proved a crucial supply of food, forage and water for local people and their animals. The same area had once suffered a severe famine as the result of efforts to eradicate the plant, which some saw as a worthless invasive species.

While most cacti are inedible, the Opuntia species has much to offer, especially if treated like a crop rather than a weed run wild. Today the agriculturally relevant Opuntia ficus-indica subspecies - whose spines have been bred out but return after stress events - is naturalized in 26 countries beyond its native range. Its hardy persistence makes it both a useful

food of last resort and an integral part of sustainable agricultural and livestock systems. Edible Cactus has a long tradition in its native Mexico, where the yearly per capita consumption of Nopalitos - the tasty young pads, known as cladodes - is 64 kilograms. Opuntias are grown and harvested in on more than 3 million hectares only in Mexico. Harvesting more than 20 tonnes of fruit per hectare is common in Israel, Italy and 50-tonne yield in Mexico.



The plant now known as Opuntia ficus-indica or the Indian fig cactus has long been an important source of food. It is currently consumed for their nutritional properties. Since long time, fruits and stems of many Opuntia species have been used in medicine for burns, wounds, edema, bronchial asthma, hypertension, indigestion and type-2 diabetes. Extracts of Opuntia species have been reported to exhibit hypoglycemic, antiulcer, antioxidant, hepatoprotective and neuroprotective activities. The cactus is the focus of many studies because they contain bioactive phytochemicals. Three antinutritional factors present in edible cactus are phytate, tannin, and oxalate. It can be minimized or eliminated using some processing methods such as soaking and fermenting.

Several food products are processed from the stem and fruit of the plant. It may also be sold to food manufacturers as a constituent of flavoured drinks, yoghurts, desserts, ice creams, cakes, pastries or confectionery. Some of the products include:







Oedema

Hypertension

Type-2 Diabetes

Cactus Lather: It is popular in the Arab countries and in the United States and are



made mixed with guava, mango and other tropical fruits. It is made from natural fruit pulps, contains no preservatives, is chewable and makes a convenient snack. It

contributes to a healthier diet in today's 'junk food' culture.

Concentrates: Juices are appreciated for their high nutritional value, while modern technology and good manufacturing practices (GMP) now ensure their taste remains similar to that of the original product. In some

places, people have begun to call them 'liquid fruits'.

Melcocha: It is a traditional product, a jam made from O. streptacantha. In recent years owing to its



increased popularity as a filling for the small pastries called empanada it has gained immense commercial importance.

Cactus Pear Cheese: They are produced in Argentina, the United States and a number of

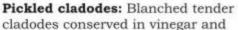




other countries. It is a juice concentrate that dominates Mexico's artisanal cactus food industries. It is produced from O. streptacantha. It is an intermediate-moisture food, which conserves well at ambient temperatures. It is marketed as a pure fruit product or mixed with pine nuts, cashews or other nuts.

Colonche: It is a very traditional product. It is prepared by artisanal methods in earthenware pots

using cultures of Saccharomyces sp. as a starter. The juice ferments rapidly and is ready to drink a few hours after decanting and has a shelf-life of 2-3 days. It is a low-alcohol content drink (4-6 percent) that is consumed while it is still fermenting, and it is sweet because of the presence of unfermented sugars.



flavored with spices with or without added vegetables and other condiments. A wide variety of pickled nopalitos can be found in domestic markets in Mexico, More





than 25 different brands are available, made with a variety of spice mixes.

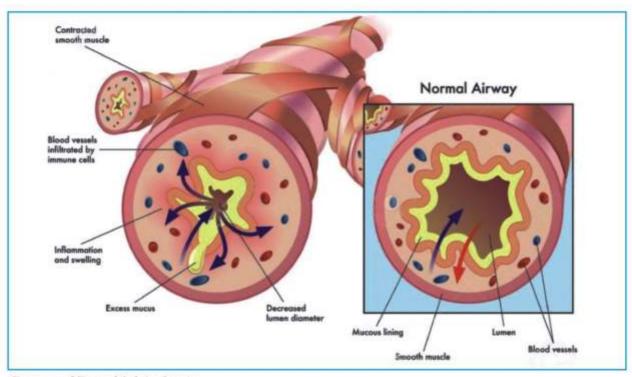
Cladode Flour: It is obtained by dehydrating and milling cladodes of different ages. The age influences the characteristics of the flour. Edible cactus flour has recently been used in the baking industry and has potential for manufacturing cookies, pastries, soups and desserts, as well as dietary fibers. The latter

application has become important because it increases consumption of soluble fiber, significantly improving the digestion of people with constipation. Vegetable cream soup, dessert formulations, cookies and biscuits can also be made with cladode flour.

It has several culinary uses as well. New products have been recently introduced in Mexican the markets. They include tender leaves (nopalitos) in sauce; these are canned leaves in various sauces, such as chili or hot pepper. Cladode pâté with soy bean; this is made from a puree of nopalitos with texturized soy bean and chicken or beef flavoring.

Cactus pear should be considered as a valuable asset, especially for food and livestock feed in dry land areas. Traditionally, cactus is used as a valuable health supporting nutrient and it also has applications in pharmaceutical industries. Cactus has immense potential to be the food of future.





Causes of Bronchial Asthama





IMPACT OF GST ON TEXTILE INDUSTRY

Rishika Didwania

2nd Year M.Sc. in Textiles & Clothing

extile sector is one of the top contributors to the Indian economy, contributing to GDP (Gross Domestic Product), employment, export promotion, etc. The industry is the second largest employer after agriculture, providing employment to over 40 million people directly, and 60 million people skilled and unskilled workers, indirectly. The Indian textile industry, currently estimated at around US\$ 108 billion, is expected to reach US\$ 223 billion by 2021. It contributes approximately 5 per cent to the GDP and 14 per cent to the overall IIP (Index of Industrial Production). It has the potential to reach US\$ 500 billion in size. The growth implies domestic sales to rise to US\$ 315 billion from the current US\$ 68 billion. At the same time, it is implied that exports will increase to US\$ 185 billion from the current approximate US\$ 41 billion.

This industry contributes over 10 per cent of the total annual exports of the country and this is likely to increase under the new Goods and Services Tax (GST) regime.

Goods and Service Tax is basically an indirect tax which is levied on the supply of goods and services. In India, it has replaced most of the indirect taxes like value added tax, central sales tax, excise duty, entry tax in order to ease the tax compliance. The GST Council has mentioned some rules regarding the e-way bill and rates. At the same time, the GST rates on job work of textiles and

the related products that are manufactured have been reduced from 18 per cent to 5 per cent.

With the implementation of GST, the difficult data of the rates and categorization of GST in the textile sector has been eased out. The decline in pricing will invert the supply rule directly, and there will be a boost in demand instantly. Due to the fall in price, there will be competition in the market thus creating a healthy environment for exports. However, on the domestic front, the manufacturers may face a set back as the price fall may result in less revenue generation.

Impact of GST on textile industry could be determined only after final rates are declared for the goods. Presently, most of the garment manufacturers opt for either complete excise duty exemption or payment at 2 per cent duty without Cenvat credit benefit as most of the raw materials do not suffer excise duty. especially in the case of cotton based sector. On branded garments, the effective excise duty rate would be 1.2 per cent (if the manufacturer opts for 2 per cent payment with abatement of 40 per cent) or 7.5 per cent (if the manufacturer opts for 12.5 per cent payment with abatement of 40 per cent). Hardly anybody would be expected to opt for the latter due to lack of credit availability.

VAT/ Sales tax would also be paid at lower rates or at concessional rates under composition schemes as applicable in different states.

Exports have continued to be free from taxes all these years. For textile and its products, GST rate of 12 per cent is expected. If it is so, then it could have a negative impact as the industry is price sensitive. Paying 12 per cent GST would be costlier for assesses who presently pay 1.2 per cent excise duty + 5 - 6 per cent of VAT which amounts to 6 - 7.2 per cent tax. Even input tax credit on inputs and input services may not be sufficient to fill the gap as natural raw materials such as cotton may continue to get exemption in GST regime. It may be noted that other materials such as chemicals, dyes, accessories and packing materials which constitutes around 8- 12 per cent of total material cost could be liable for standard GST of 18 per cent which would be eligible as input tax credit when output GST is paid.

IMPACT OF GST PRE-GST INDIRECT TAX STRUCTURE IN INDIA

However, in case of manmade fiber segment, most assesses have been paying excise duty at regular rates along with VAT. Inputs such as polyester fiber, nylon and other petrochemicals suffer excise duty, which can be claimed as Cenvat credit. This segment may get a level playing field as GST rate of 12 per cent could have positive impact on them who are already paying more than 12 per cent tax. For this sector, seamless credit could also result in lower price of goods which could boost demand for non-cotton garments benefitting consumers by way of price reduction. It is expected that there can be a gradual shift in the domestic textile industry towards manmade fibre under GST

regime due to tax advantage. POSITIVES NEGETIVES · Reduction in manufacturing costs as Cotton yarn and fabric would now attract 5

- many taxes shall be subsumed.
- . The tax rate on cotton textile has been kept low at 5% which will boost the farmers to produce more.
- · Silk and jute have been kept under "nil" category under the GST.
- per cent duty from nil previously.
- . No uniform rate structure for textile industry.
- · Multiple registrations and returns would prove to be a heavy burden.
- · Technology driven law which would pose difficulties to small players.
- · Competition scheme shall not be available for job work

GST implementation was expected to produce

impetus to various reforms and policy measures envisaged by the Government for the ease of doing business and to take India into a simple, transparent and tax friendly regime. It was meant to simplify the present procedures through convergence of various complex indirect taxes into a unified platform and conjointly improve the textile export from India.

GST levy on Textiles and Ap	
Silk and Jute	0%
Cotton and natural fibre	5%
Manmade fibre	18%
All categories of yarn	5%
Manmadeyarn	18%
Dyeing and printing units	18%
Embroidery and other job work services	18%
Fabrics, irrespective of fibre	5%
Apparels priced above ₹1,000	12%
Apparels priced below ₹1,000	5%

GST impacted the textile industry with

some genuine benefits as well as some serious challenges. It brought with it a robust and comprehensive IT system. Although GST brought uniformity in the rates of taxation for single class of goods, most textile items that were exempted before the implementation of GST have now been made taxable and garments and readymade textiles of lesser rate of tax now taxable at higher rates. It has enabled a system of seamless taxcredits throughout the value-chain and made export with zero rates possible. However, the monthly GST return for the medium and large dealers caused hike in the compliance cost along with mandatorily registration for GST and submission of GST waybill every month.

Although there may be a few drawbacks related to GST for the textile industry due to the higher tax



rate and removal of benefits under cotton value chain, but GST will help the textile industry in the long run through more number of registered taxpayers under a well-regulated system. It is also anticipated that GST will help the textile industry to get more competitive in both the global and domestic markets and create opportunities for sustainable, long-term growth.



ZDHC: ZERO DISCHARGE OF HAZARDOUS CHEMICALS

Rachita Mandhana

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The textile industry is a significant contributor to many economies, encompassing both small and large-scale operations worldwide. In terms of its output or production and employment, the textile industry is one of the largest industries in the world.

Textile processing industry is characterized not only by the large volume of water required for various unit operations, but also by the variety of chemicals used for various processes. This leads to generation of wastes at each stage of wet processing. The waste includes liquid, gaseous and solid wastes, some of which may be hazardous and detrimental to human life.

There are over 600 chemical used in textile manufacturing that are harmful.

Worldwide environmental problems associated with the textile industry are typically those associated with water pollution caused by the discharge of untreated effluent and those because of use of toxic chemicals especially during processing. The effluent is of critical environmental concern since it drastically decreases oxygen concentration due to the presence of hydrosulfides and blocks the passage of light through water body which is detrimental to the water ecosystem. Textile effluent is a cause of significant amount of environmental degradation and human illnesses. About 40?% of globally used colorants contain

organically bound chlorine, a known carcinogen. Chemicals evaporate into the air we breathe or are absorbed through our skin; they show up as allergic reactions and may cause harm to children even before birth. Due to this chemical pollution, the normal functioning of cells is disturbed and this, in turn, may cause alteration in the physiology and biochemical mechanisms of animals resulting in impairment of important functions like respiration, osmo regulation, reproduction, and even mortality. Heavy metals, present in textile industry effluent, are not biodegradable; hence, they accumulate in primary organs in the body and over time begin to fester, leading to various symptoms of diseases. Thus, untreated or incompletely treated textile effluent can be harmful to both aquatic and terrestrial life by adversely affecting the natural ecosystem and causing long-term health effects.

Thus the textile industry has many reasons to place an emphasis on sustainability, including reduced costs, protection of the environment and sustained goodwill from its customers for eco-friendly practices.

Cleaner production is an attractive approach to tackle environmental problems associated with industrial production and poor material efficiency. It is a preventive,





company-specific environmental protection initiative that is intended to minimize waste and emissions and maximize product output. The concept was developed during the preparation of the Rio Summit as a programme of UNEP (United Nations Environmental Programme)) and UNIDO (United Nations Industrial Development Organization) and the programme was meant to reduce the environmental impact of

industry. It was built on ideas used by 3M in its 3P programme (pollution prevention pays). Starting from the simple idea to produce with less waste, Cleaner Production was developed into a concept to increase the resource efficiency of production in general.

Chemical Group	Use/Application	Harmful Effect
AP/APEOs	Wetting, detergency & emulsification	Endocrine disruptor, aquatic toxicity
Phthalates	Softeners & plasticizers	CMR
Formaldehyde	Wrinkle-free, dye-fixing	Carcinogenic, dermatitis & respiratory sensitize
PFCs	Oil & water repellants	vPvB & Brain tumors
Isocyanates	PU coatings	Carcinogen & toxic
Amines in Azo Dyes	Dyes & pigments	Bladder cancer
Heavy Metals	Dyes & pigments	STOT & toxic
Chlorinated Solvents	Spot cleaning & adhesives	CNS, carcinogenic & ozone depletion









In 2011, six textile brands joined to form the Zero Discharge of Hazardous Chemicals (ZDHC) Programme with a mission of catalyzing positive change in the discharge of hazardous chemicals across the textile and footwear product life cycle. Key fundamental principles underpin the programme work: transparency; preventive, precautionary, and integrated approaches to chemicals management; and fact-based decision making that will deliver lasting solutions. It started mostly as a response to the Greenpeace DeTox campaign. Today the programme includes a collaboration of 28 signatory brands, 81 value chain affiliates, and 17 associates within sports, fashion, luxury and outdoor industry. It is a group of apparel and footwear brands and retailers working together to lead the industry towards zero discharge of hazardous chemicals by 2020.

The key focus areas of ZDHC are:

- Manufacturing Restricted Substances List (MRSL): In 2014, the ZDHC Roadmap to Zero Programme developed and published its first Manufacturing Restricted Substances List (MRSL), list of chemical substances banned from intentional use in facilities that process textile materials and trim parts in apparel and footwear, to provide a harmonized approach to managing chemicals within the apparel and footwear supply chain. Through the ZDHC-MRSL Programme information, tools, trainings and conformity process guidance were provided to brands and their suppliers with the aim of restricting the use of harmful substances in the textile industry supply chain to protect communities and the environment. The ZDHC MRSL establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities. The limits are designed to eliminate the possibility of intentional use of listed substances. The programme's vision is to have the ZDHC MRSL and conformity process guidance serve as the adopted textile and apparel industry standard.
- 2. Research: The development of the ZDHC Research List was a direct outcome of the programme's collaborative work with the Outdoor Industry Association (OIA). The list identifies high priority chemicals for which there are no clear feasible alternatives. This focus area seeks to encourage research into the development of safer alternatives for substances on the ZDHC Research List so that brands and their supply chains can make informed substitutions and conduct research on priority chemicals for which safer alternatives do not currently exist.
- 3. Audit Protocol: The audit protocol was developed to ensure consistency in environmental auditing across the supply chain and sharing of audit findings (whilst ensuring compliance with antitrust regulations). The protocol sets out the complete audit process for use by brands/retailers, facilities and their auditors when planning and carrying out a self-assessment or an environmental audit.

- 4. Waste Water Quality: Recognizing that well designed, properly functioning wastewater treatment plants, good process controls and effective chemicals management are key tools to minimize chemical pollutants being discharged into the environment; ZDHC developed a Wastewater Quality Guidance and Standards. Under this the risk of releasing factory wastewater also containing chemicals found in the 11 priority classes are reduced or eliminated.
- 5. Data & Disclosure: In 2014, the ZDHC Programme developed a universal set of standards to organize the way to collect key chemical data for sharing with all stakeholders. It has worked with other organizations (like SAC and OIA) to develop effective means for sharing standardized chemistry management data in each of our key focus areas for the benefit of all.
- Training: ZDHC training is designed to support implementation of ZDHC standards throughout the value chain and foster adoption of ambitious chemical management standards by brands, chemical suppliers, manufacturers and other intermediaries.

Apparel and footwear supply chains are long, complicated and continuously moving into developing countries where labor is cheap. This means manufacturing facilities and workers may lack the knowledge and training necessary to implement a chemicals management program. ZDHC has established and implemented the following competencies to drive their work

- · Capture and share best practices
- Use management systems thinking
- Open transparent communication
- Engage with stakeholders across different regions and cultures

Awareness about ZDHC among Indian fabric mills, garment exporters and chemical industry is quite poor. NimkarTek DEtox Laboraoty, a Chemical Management firm has become the first accepted testing laboratory in India to indicate Level 1 conformance with the ZDHC's Manufacturing Restricted Substance List. NimkarTek has since then been working towards creating awareness

about the roadmap to Zero
Discharge of Hazardous
Chemicals by organizing a
number of interactive and
training programs for
the industry. However it
is not enough and the
associations of the
chemical industry and
textile manufacturers
should take up this
issue with their members
more vociferously through
awareness initiatives as Zero

NIMKARTEK DETOX LABORATORY

will to impact all in the textile trade. The Indian government should also take proactive steps to upgrade laboratories that it had set up to tackle the eco-issues of the 90's.



DIGITAL FASHION SHOWROOM

Anisha Shankar

2" Year B.Sc. (Textile Science, Clothing & Fashion Studies)

Retail today is getting more crowded, complicated and confusing. There are so many factors playing a role when it comes to supply chain, customer experiences, building and maintaining a consistent brand image. In today's fast-paced world driven by digital and social, how can a fashion, luxury, or cosmetic brand become the next big thing? It all comes down to accessibility. To generate press and get noticed by global markets, brands must better leverage their digital assets. By making assets available to for global media contacts to search and download,

brands can increase editorial opportunities and overall exposure.

One element, that is getting more and more attention and being revolutionized, is wholesale in the fashion industry. With technology invading every single aspect of the retail world, wholesale processes are no exception. Whilst everyone is talking about increasing customers' shopping experiences on a B2C level, one specific shopping experience must not be disdained: the B2B customers. i.e. wholesalers and retailers themselves. Since B2C processes and especially expectations of customers evolved in a high pace in the recent years, also retailers have to adapt to those changed needs.



The biggest upside to technology in fashion is the ability to offer consistency, and being able to personalize the customer's shopping patterns. Indeed, fashion companies that effectively deploy the right technologies is able to enhance their competitive advantage by personalizing products and shopping experiences, and refining logistical processes that nibble away at budgets. However, fashion has been slow to harness many of these opportunities. Fashion Brands are only scratching the surface right now of technologies like virtual reality or artificial intelligence.

What is a Digital Showroom?

The digital showroom revolutionizes the sales experience for retailers by offering them a more engaging and seamless buying approach. The interactive system blends collection information, sales tools and brand content in one seamless touch-screen interface.

It combines instantaneous high definition visual feedback with up-to-date price confirmation



throughout the product selection process, allowing customers to feel confident and assured in all aspects of their new purchase. Based on innovation and technology, these tools simplify complex decision making scenarios, while easily informing customers about the products in a stress-free retail environment. The main concept is to connect customers to the products, speed and increase sales, raise profit margins and promote overall satisfaction throughout the online and dealer showroom buying experience. It is a sales tool for customers to visualize, configure and buy the perfect product.

Benefits of Digital Showroom

Eliminating the need for samples, order forms and eventually physical showrooms, the new concept simply relies on an interactive touch screen table linked up to huge screen wall, on which buyers can digitally view every single item in the collection to create custom orders. They can view head-to-toe key looks, zoom in to see design details and textures, and click every garment to display prices, colour options and sizing ranges. Assortments are laid out on a blank background onto which items can be



dragged and dropped to create full looks. At the end of the process, customers receive an email with a PDF containing their complete order.

The Rise of the Digital B2B Showroom

The first encounter with a B2B digital fashion showroom came three years later in 2015 with the announcement of the Tommy Hilfiger digital showroom. The Tommy Hilfiger showroom took two years of internal teambuilding which was likely spent in building the software. The motivation was to cut lead times from product development to the product hitting the shelves. This would



result in a reduction in the number of samples with the future aim being to remove all samples from showrooms in the future.

Tommy Hilfiger may well be leading in the Fashion sector, but they were not the first apparel company to do this. Adidas were also using technology like interactive touch screens and 3D product modelling to create a digital immersive showroom. Of course,

other brands would soon follow including Hugo Boss who created their B2B digital showroom experience a year later in 2017, complete with a 65-inch touch screen mounted in a table. According to their website Hugo Boss plan to roll the format out globally throughout 2018.

The Present - Getting Started with a Digital Showroom

The evolution of the showroom has gone from physical to digital to virtual in the span of six

years or so. Although the latest tech like VR (virtual reality) will

always grab the headlines, it is the technology that was being introduced in 2012 that is now being widely adopted by brands. That is where the real opportunity is right now to upgrade the customer

experience. The key difference between 2012 and 2018 is the technology available. For the more digitally

advanced who have solutions in place to organize product information for go-to-market it is likely to have the relevant information, specs and pictures ready to display in a digital showroom setting. Integrating this with software like aWorkbook which is a powerful B2B sales tool and order taking app that enables reps to

deliver engaging and interactive product presentations and capture orders instantly to maximize sales opportunities.

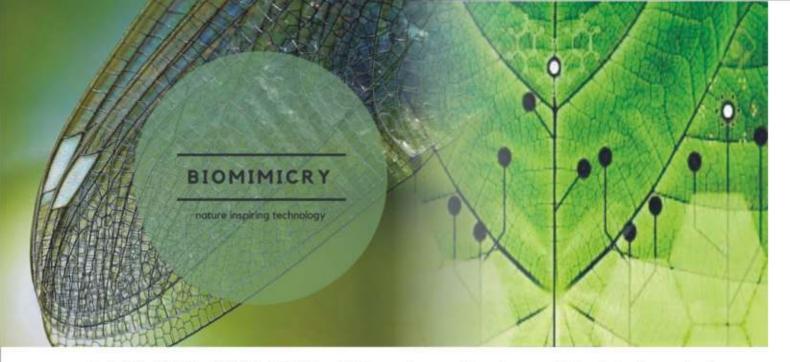
Digitalization is a massive topic



across many industries and the rise of the omni-channel experience is just as important in B2B as it is in B2C. The trends generally arise in B2C and filter through into B2B, we saw that with ecommerce. As retailers begin to adopt digital signage and create apps to enhance their stores, brands who want to stay relevant must do the same for their buyers meaning the digital showroom is here to stay but in which form, we really do not know!

Who knows if things like holograms could be introduced in the future - removing the need for a headset completely. At the time of the Tommy Hilfiger digital showroom the opinion was, and still is that digital showrooms are the way forward, more efficient and more effective; buyers and sales people like it; is not the future, it is the now.





BIOMIMICRY IN TEXTILES

Simran Khan

2" Year B.Sc. (Textile Science, Clothing & Fashion Studies) "In all things of nature there is something of the marvelous", said the famous philosopher, Aristotle. Nature has been an inspiration to the art and design world since ages. Every thing of beauty in nature is designed with certain functionality and a purpose. The world around us is surrounded by nature that spurs and provokes ideas that exist and can be executed.

Biomimicry, like the name suggests means "to imitate life" literally. The word is derived from the Greek word "bios" and "mimesis" also known as biomimetics or imitation. It practices the use of the marvels of nature and its functioning for developing new innovative technology. Biomimetics, ideally, is the process of incorporating principles that promote sustainability much like nature does from 'cradle to grave', from raw material usage to recyclability.

Many innovative textile products have been engineered using biomimicry.

There are many textile technologies that mock the works of nature to come up with novel products. Adapting and using the fruits

of biomimicry in textiles has given solutions to many problems. Self cleaning, self repair, energy conservation, drag reduction, dry adhesion, superhydrophobicity are a few solutions that are provided by biomimicry. Bio-inspired textiles are a result of fabrics that have functional surfaces, structural colors, self-healing, and thermal insulation properties.

With technology poised to change the way we dress in the future, here are few examples of innovative fabrics that take their cue from the natural world.

Exploring the Lotus Effect:

Water spilled on a lotus leaf does not wet its surface but simply beads up and rolls off, cleaning its surface from accumulated dust and dirt in the process.

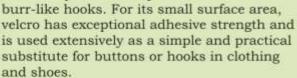
This effect is known as "superhydr"

ophobicity"



or "lotus effect", which researchers have mimicked to create waterHooked on Velcro: Invented in 1948, Velcro has become a textbook example of biomimicry - an emerging science that emulates nature to solve human problems. And yet Velcro's invention was something of a

happy accident, for which we must thank the dog of Swiss inventor George de Mestral. After a walk in the fields, de Mestral noticed burrs of a fruit (Xanthium strumarium) stuck to his trousers and his dog's fur, which led to his creation of a new hook and loop fastening device, Velcro. He discovered that an elliptical fruit with a length of 1 cm had densely packed hook-like projections. To enhance adhesive abilities, velcro consists of a strip with round loops and a strip with



Fast-as-a-Shark Swimsuit: Shark is one of the fastest swimmers in water. For swimming at great speed it is important to lower the



frictional drag of the skin against water. So, nature has given us sharks' sandpaper-like skin that reduces drag in water. The shark skin also impedes bacterial growth, thereby acting as antibacterial fouling surface inhibiting the

growth of microorganisms on such grooved surface. Shark skin effect was applied to the swimsuit, and the surface of the swimsuit was covered with minute tentacles, which look like small teeth. Inspired by shark skin, Speedo's Fastskin line of performance-enhancing swimwear was worn by swimmers from over 130 countries during the 2000 Sydney Olympics, setting 13 out of 15 world records.

Dye-free fabrics from butterflies: Nature has unique abilities to manipulate light. Most surfaces in nature are not just functional; they often produce brilliant, vivid and iridescent colours. Examples of structural colours have been reported in a large number of species, including butterflies, bird and beetles. Butterflies probably exhibit the most interesting varieties of optical microstructures and

have been studied extensively. Morpho butterflies' wings appear cobalt blue despite lacking colour pigment. This optical illusion is due to the many layers of protein on the scales of the butterflies' wings that refract light in different ways. In 2010, Australian designer Donna Sgro created a dress made from Morphotex - a fabric that imitates the microscopic structure of the wing

using nanotechnology. This innovation also saves on water and energy





used in conventional dyeing. Although Morphotex is no longer manufactured, butterflies' iridescent wings have inspired another technological breakthrough - displays for mobile phones and other electronic devices that can be viewed under any light conditions.

Dry Adhesion Gecko-Feet: The gecko has a unique clinging ability; it can create dry adhesion using its amazing feet. Geckos have developed the most complex adhesive structures capable of smart adhesion with the ability to cling to different smooth and rough surfaces, and also

detach at will. Their feet contain millions of very fine hairs which can create dry adhesion to smooth and rough surfaces. Scientists have been inspired by the clinging ability of geckos and many attempts have been made to construct the surface structure



like gecko feet with man-

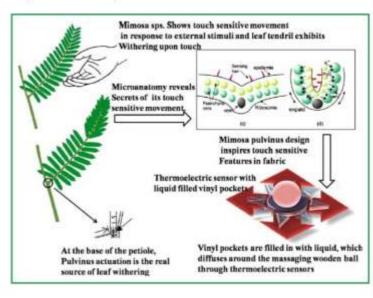
made materials in order to achieve dry adhesion. Synthetic gecko foot fibres have been created by nanomoulding using silicone, polyimide, polyvinyl siloxane and polyurethane and carbon nanotubes. A team of polymer scientists and a biologist at the University of Massachusetts Amherst have developed artificial Geckskin, about 16 inches square, and can hold a maximum force of about 700 pounds while adhering to a smooth surface such as glass.

Camouflage Clothing from Squid: Squid, octopuses and other cephalopods are known for their ability to change the colour and texture of their skin. This is achieved by expanding or contracting their pigment-filled cells. By taking



inspiration from these underwater colour shifters, scientists are taking the first steps towards developing self-camouflaging clothing that could be a boon to the military. Another feature of deep-ocean creatures that could be explored for fashion is bioluminescence, or ability to produce light - a perfect attribute for clothing to be worn anywhere from road works to rave parties.

Touch sensitive Apparel Design: Touch sensitive plant Mimosa pudica shows human muscle's actin-myosin like quick sensing and actuation with its leaf-moving muscle, so-called pulvinus which performs touch sensitive hydraulic actuation. This exhibits one of the remarkable weathering phenomena in plant tissue when touched and exemplifies the fastest plant movements. Mimosa pulvinus mediated touch sensitive actuation put forth an enormous opportunity to design fabrics which shrink and de-shrink in response to external stimuli such as touch, sound and/or light. In fashion industry, this would represent a dream opportunity to come true when models walking on ramp will show folding-unfolding modes of smart fabrics with novel sensing capacity. Adopting functional mimesis to the Mimosa leave pulvinus, researchers have designed haptic fabrics by knitted smart materials with



touch therapy features. Such wearable fabrics equipped with actuators and sensors perform artificial massaging and aromatizing functions while walking. Most important, such fabrics could provide a sympathetic side of apparel design by attending, understanding and responding to another person's emotional expressions, a fundamental requisite of elderly person, spending lone time in hospitals.

"Nature is full of infinite causes that have never occurred in experience"

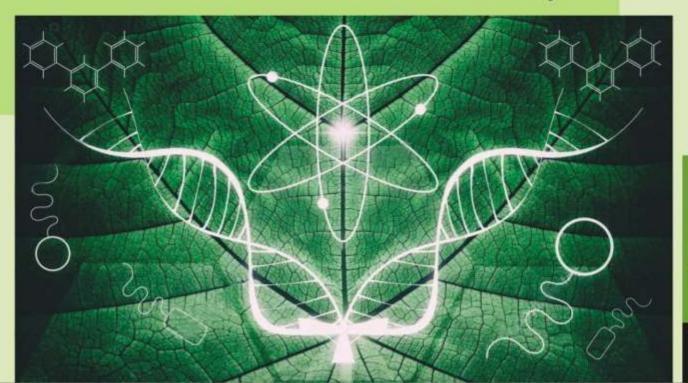
Nature is an extremely vast database of structures and mechanisms that proved to be clearly superior to those man-made. To quote biomimicry pioneer Janine Benyus, "When we stare this deeply into nature's eyes, it takes our breath away, and in a good way, it bursts our bubble". There are numerous examples of fibrous structures, multifunctional materials, thermal insulating materials, structural colours, and many others that can serve as sources of inspiration for future sustainable textiles. In many ways, textiles offer unique opportunities to imitate nature. The growth and possibilities in producing fabrics from biomimicry are ample since nature presents a plethora of properties that can be incorporated to shape the future of smart textiles. Textile technologists, fibre scientists, and textile manufacturers around the world are making



attempts to make textile products inspired from nature into reality biomimicry is an element of nature that is slowly being discovered and increasing its presence in the field of textiles.

"Technology has always been inspired by nature"

-Janine Benyus





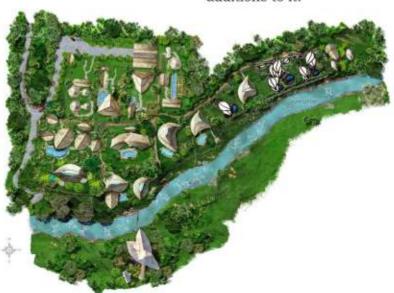
GREEN VILLAGE IN BALI

Pratibha Singh

2nd Year B.Sc. (Interior Designing)

Green Village is a living community of globally connected individuals who care about nature, originally visioned and developed by John Hardy. It is a planned community of bamboo residences nestled in the lush forests of Ubud, Bali. Ibu in Balinese means Mother, and ku means mine. Ibuku's philosophy is similar to Green School's desire to maintain a relationship with Mother Earth and the environment and delicate ecosystem that surrounds them.

Located by the terraced slopes of Ayung River in Bali, the compound hosts 12 unique and sustainable bamboo houses and villas, hand-constructed entirely by the IBUKU architectural team. The master-planned compound has been designed to accommodate a sustainable and comfortable lifestyle; with all the luxury Balinese nature has to offer. The structures and homes created by the team feel more like extensions of the natural environment around them than additions to it.





The houses are crafted into playful shapes and designs with techniques that are not possible to use with standard construction materials.

The Green
Village
comprises of
not just any
houses but
deluxe six story
mansions
perfect for a
relaxing,
sustainable

vacation. The latest and largest structure lies on the other side of the river with its five stories towering above the forest canopy. These structures are used as private residences, hotel villas and classrooms in Green School. While some families live in the village, some homes are luxury retreats and can cost between \$500,000 and \$2million. Green Village has attracted nature lovers, entrepreneurs, and celebrities from all over the world. The compound is only a short scenic walk from Green School, the world famous campus where education is designed around the principles of an organic permaculture system.

In 2010 Elora Hardy, Ibuku's founder and creative director, returned to Bali to continue the evolution of bamboo design under the name IBUKU. Together she and her team of talented Indonesian designers



and architects have built sixty new bamboo structures in Bali. Nine of these buildings now make up Green Village, a community of luxurious private homes neighbouring Green School. Elora and her team continue to expand the potential of building exceptional bamboo structures. Over the years, their projects have increased in scale as Elora and her team continually seek to elevate this seemingly prosaic material to luxurious new heights.

Their goal is to provide spaces in which people can live in an authentic relationship with nature. They do this by designing fully functional homes and furniture that are made of natural substances and built in ways that integrate with nature. They give their projects detailed care and attention from start to finish, including bespoke interior furnishings. Over 60 bamboo structures have been built in Bali, Indonesia, and around the region.



Design Process

Their design process occurs on the land and for the land. The houses are tailored to gently rest on their foundation, carefully set in the earth's natural contour, so that they have minimal impact on the environment.

Instead of conventional blueprints, the team creates to-scale structural models made of hand-whittled bamboo sticks. These models are replicated in 3D line in computer Programs for their engineers to study and confirm that the building adheres to their strict codes. The design process does not end there. Their architects and engineers then follow the project in depth through completion to ensure structural integrity and longevity. They sketch a bit, and make simple real-scale mock-ups on the site. Once the placements are clear, they make 1:50 scale structural models out of bamboo.

This is where the art-and engineering-happen. The bamboo builders follow this model (not blueprints) to build the structure of the house.

There are over 100 people involved in construction, with an average of 20 onsite at one time. No heavy machinery, no cranes, no bulldozers. Walls are woven onsite, and craftsmen whittle bamboo pins to pin splits of bamboo skin onto the floor one by one. These



are truly handmade homes. While
the structure is
under construction,
their interior design
team custom
designs furniture
and interiors for
each home they
build. Craftsmen
combine their

traditional skills with modern carpentry techniques to produce their all-bamboo furniture. They transform poles of bamboo into floors, walls, baskets, railings, beds, chairs, kitchens, ceilings, stairs, and tables.

The firm uses bamboo for its "strength, beauty, and flexibility and also because of its four-year growth cycle and carbon sequestration where carbon dioxide is removed from the atmosphere capacity. It is most environmentally conscientious building material conceivable. In Green Village, bamboo Petung (Dendrocalamus Asper) comes locally from Bali and Java; purchased from individual farmers along the river valley.

The main structure of the house is made of bamboo, however strong foundations are constructed from stone, concrete and steel. To ensure long-term weather resistance, roofs are



made using bamboo shingles with an aluminum lining. Interior accents are created using natural materials found in local environs, including

giant stone slabs, beaten copper in bathrooms, paper walls, and hammered brass details, all handmade by local artisans using traditional techniques. Everything from tiny nails to massive structural elements is constructed entirely in bamboo. Each structure measures roughly 300 square meters and is made with almost nine kilometers worth of bamboo. There are 1450 species of Bamboo in the world, and the team uses 7 of them. The walls of the houses are made from bamboo planks or tightly woven natural-fiber or paper panels. The dramatic overhanging roofs that enclose the homes of the Green Village are made from bamboo shingles and aluminium lining, which protect the interiors from the savage monsoon rains.

Clever design and roll-down shutters help protect those inside from rainstorms, while banana paper for interior walls and some aluminium for roofing are generally the only concessions to non-bamboo materials. Simplicity then is a key design element but it has not restricted some non-organic basics, with electricity and high-end kitchen fittings standard throughout the buildings.



From customised pieces to interior designs, Ibuku's furniture brings bamboo's unique warmth into any space, across the world. Their team of designers create innovative, hand-made masterpieces including stools, chairs, tables,



lounges and beds. Their bespoke interior basket structures, screen panels and sculptures bring a sense of wonder into the everyday.

Because of high resistance, bamboo makes great storage pieces such as bookshelves and cabinets. The lighter varieties are commonly used for stools and dressers, while sturdier ones are made into larger tables and sofas. Many people accent their existing furniture with bamboo veneers, mats, and curtains. The bamboo design specialist has revealed a 'warm and tactile' furniture collection. Designed for people who want to bring a natural feel into their interior design projects, the collection features a selection of seating, shelving and fixtures hand crafted out of bamboo. Collection designs include the Journey Table, Moon Lounge Chair with leather seat, Sway Teardrop swing and Eclipse shelving.

There are currently 12 houses in the Green Village, of them, Sharma Springs is currently the tallest bamboo structure in Bali. This bamboo villa is not only an architectural wonder, but also a work of art. The latest project is the Eclipse House, which was completed by the end of 2018.

In today's world, climate change is very real. The need for sustainable homes has never been more. Green Village is a huge step in the direction of sustainable living and curbing global warming. Its generous use of bamboo, a natural and local building material, positively contributes to the environment. Bamboo should not be constricted to Bali solely, but should be put to such use in all other places where bamboo is easily available. The material may even be used in other types of climate as structures enclosed by rammed-earth walls, with insulated roofing material. Green Village should be an inspiration for everyone to not only stop at bamboo but also break the limitations of every such sustainable material.





CONTAINER HOMES

Nitu Bhuwania

2" Year B.Sc. (Interior Designing)

Container homes are exactly what they sound like; homes made from the steel shipping containers that one see carrying goods everywhere on trains, trucks, and ships. Shipping container architecture is characterized by the re-use of steel shipping containers as a structural element. It is sometimes referred to as Cargotecture, a mixture of cargo with architecture. The use of containers as a building material has grown in popularity due to their inherent strength, wide availability, and relatively low expenses. From these giant Lego blocks, people are building homes of all shapes and sizes.

Containers are being used to make homes, studios, cabins, and offices. The smallest container makes a tiny box of a home at about 100 square feet of floor space. Eight larger containers together can make a two-storey house at about 1400 square feet. Hundreds of container micro-apartments together can make a huge apartment building. They are often marketed as being

environmentally friendly because they are said to be made from used containers, thus conserving metal resources. There are lots of old shipping containers out there, no longer in circulation, and repurposing them into homes has strong appeal. Besides it is far more economical.

Depending on the use of the container, shipping containers are designed and



manufactured to cope with a long and arduous life moving goods around the world. Accordingly they are very sturdy and secure. A used container can be in international operation for more than 10 years and sometimes longer depending on its use, location and reasonable maintenance. It may stretch to a further 10 plus years of use. New containers are expected to last over 30 years.

Why Container Homes?

Containers are flexible and easy to modify. Even the form factor is quite strong in terms of space utilization. A container is universal and unironically perfectly fit for human living when modified accordingly. The form factor on its own is incredibly versatile in comparison to regular housing units.

Regular housing can cost double the price of a container unit home, mostly due to material costs and other elements. The reasoning behind the structure of a container is a basic rectangular shape which is usually 20m2. Shipping containers utilize negligible amount of water or other resources in order to become a house.

Any shipping container is composed of 6 planesfloor, top and four sides, made of steel, in regular corrugations that help in making these sides strong enough to tolerate loads, or pressures, in addition to steel posts and enforcements in the corners, or intersections of these planes (sides), or below the floor, or above the top. The loadcarrying segments of these containers are made of steel profiles- the frame, the bottom cross members and the bottom side rails. The walls of the containers are constructed from weather resistant corrugated steel, and the flooring is typically made from plywood with glass fiberreinforced plastic coating.

Unlike some more traditional types of residential construction, shipping container homes have the added issue of an exterior that is completely made of steel. Given how great conductor steel is, it makes it especially ineffective at keeping the airspace at a different temperature than the air outside. Therefore, insulation is needed more for container homes than for other construction

How to Build a Shipping Container Home?

Step 1: Make a Plan: The first step is making home plan including home design, budget and location.



Single Family Residence Profile Area: 320 ft^c (29.7 m²) Sleeps: 4-6*

Configuration: 2 bedrooms Community Layout: Detached Included Amenities:

- 3/4 bath
- · HVAC*
- · Range Refrigerator

Step 2: Buy Containers: There are many ways one can get container i.e. from the local place or one can buy a second hand container. It is important to inspect it properly and make sure the container is perfect and in good shape.

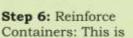


Step 3: Find an Engineer: For special placement of container or for any modification, one must consult an engineer. Any removal of the structural components of the shipping container without reinforcing it can cause the container dangerous and unstable.

Step 4: Building Foundations: While building the foundation of a container home two main factors should be considered - budget and the environment. The foundation should not cost too much money; nor should be unfit to the land condition.

Step 5: Connect the Shipping Containers: Before connecting, the containers are placed on the

crane. They are connected in many ways, including bolts, clamps and welding. Welding is the most secure and safe way to connect containers.



done before removing any components from containers and is done before roof building. Steel is mostly used for the reinforcement work.

Step 7: Do Some Cuttings: Cuttings are only done if a window or a door is required between the container rooms. Plasma cutter, cutting torch, grinder, and even a jig saw can be used for cutting.

Step 8: Work on the Container Plywood Floors: The floors are treated with pesticides like epoxy to prevent insects during sea transportation.



Step 9: Add Doors and Windows: Doors and windows are added on a wooden frame. The wood frame is placed first before placing the doors and windows.



Step 10: Power it Up: Wiring should be done prior to furniture arrangement and other

things. It is difficult to drill holes through thick container walls. One can also by- bass the wall and stick the wires around the wall.



Green Building:

Containers are ecofriendly, as they are repurposed into homes instead of being melted down. A large amount of cargo containers is discarded in ports across the globe because of one-way shipments.

Reusing a single 40' container upcycles about 3500kg of steel and saves about 8000 kWh that would otherwise be needed to melt it down. Repurposing it only uses about 400

kWh. Using containers also prevents the use of bricks and cement. The cement industry is one of the biggest producers of CO2 and bricks essentially make the natural materials they are made of, inert.

Cost Effective: In India, shipping containers typically cost only Rs. 60,000 - 100,000

depending on their size. There are already the perfect shape to be repurposed into homes, so a home built out of them is a minimum of 30% cheaper than a same sized home built in brick and mortar. The structural work is also minimal, reducing the cost further.

Structural Stability: Containers are also "virtually indestructible". Shipping containers are designed to bear heavy loads, withstand harsh climatic conditions, as well as rough seas and can also easily be stacked one on top of the other to create multi-story homes. Their structural stability makes such homes earthquake and hurricane proof, which makes them extremely safe for natural disaster-prone areas.

Ease/Speed of Construction: Building a housing structure out of a shipping container takes roughly 2-3 weeks in comparison to brick







and mortar structure which takes around 4-6 months to make.

Off Site Construction: Container homes can be built off site and then delivered to the land ready to move in to.

Emerging Trends

Several conditions in the real estate market make container housing worthy of serious consideration. Increased demand for affordable housing due to the recent recession pose opportunities for container housing. Conditions that lend themselves to container housing include the need to reduce homelessness, create emergency housing after natural and man-made



with wood, and has two cozy balconies on the roof of the horizontally placed container. Not only The Skit is built using recycled shipping containers, but it is also very sustainable. It is equipped with a roof top mounted solar panel array, which generates enough energy to make it completely independent of outside energy sources. The Skit has a rainwater collection system, which makes it water efficient. It is also equipped with a composting toilet and shower that is powered by the collected rainwater. Container homes seem to be the future of building industry. Its versatility as a living space is commendable. Not only residentially but also commercially it has shown excellent results.In India first container home was made in

Bangalore. The entire complex consists of four

containers, two making up the container home

including bedroom, kitchen, living room and

bathroom and other two being used as office

vacation home or office. The exterior is cladded

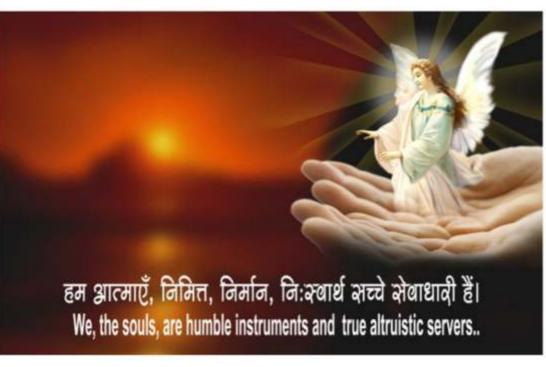
disasters, and provide workforce housing in areas where there are shortages due to job market shifts. They can also be used as beach front houses. Along with this the next generation of container housing brings features such as flexibility between temporary and permanent use, supertransportability, and mechanization.

The Skit

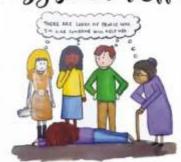
The Georgia-based architect Dachi
Papuashvili constructed a tiny home using
two shipping containers. He named this
house "The Skit" and he planned it like a
cross, with one of the shipping containers
standing vertically and the other traversing
it perpendicularly. The Skit is a planned 4floor structure, with three floors measuring
only 43 square feet, and fourth measures
130 square feet. It was designed to be used
as a full-time residence for a single person,
and it can also be used as a guesthouse,







The Bystander Effect



ALTRUISM FOR SURVIVAL

Jyoti Shah

2" Year M.Sc. in Human Development

here are times in our life when we have helped others for no specific reason, for example, lending a very important book to a friend before exam. Many people even risk their lives to help others, like local residents helping elderly couple to come out of their house when fire broke out due to short circuit. 'Altruism for Survival' means helping others selflessly and this deed in turn may help individuals to survive in this world. It is a form of prosocial behaviour that emerges out of motivation and desire to help others without any expectation or reward.

Altruism is the principle and moral practice of concern for happiness of other human beings and/or animals, resulting in a good quality of life, both material and spiritual. It is a traditional virtue in many cultures, core belief of different religious practices and/or simply a secular view.

There are many views regarding altruism and models depicting how it works. Some consider it as volunteerism; while others regard altruistic personality as a schema with some ulterior motive. In negative state relief model, the helper interprets the situation which requires help and becomes upset. He / she thus help the victim to relieve himself/herself of that negative emotion that was bothering him/her.

Religious and cultural values also teach us the principle of altruism and selflessness.





Great personalities like Mother Teresa, Azim Premji, Sindhutai Sapkal deserve a mention for their altruistic acts. Mother Teresa devoted her life for the sick and poor. She said, "At the end of life, we will not be judged by how many diplomas we have received how much money we have made, how many great things we have done. We will be judged by I was hungry, and you gave me something to eat, I was naked and you clothed me. I was homeless, and you took me in." Azim Premji, Chairman of a renowned multinational corporation is a great philanthropist and has decided to donate 2 billion dollars towards education in India. Affectionately known as the Mother of Orphans, Sindhutai Sapkal, is a great example showing that help does not necessarily have to be in the form of money, but it can be in the form of love, care and affection towards more than 1000 orphan children that she has raised and groomed to become doctors and lawyers.

All in all, in this fast moving pace of life, it is necessary to be kind, selfless and have an altruistic personality which would make us feel better than others and will invoke high rates of survival. Helping an old man cross the road, offering your seat to a needy in a public transport or feeding stray animals are all characteristic feature of an altruistic personality.

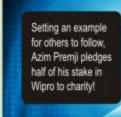


Mother Teresa

Mother of orpains Nurtured 1050+ orphaned children. Has a family of 207 son-in-laws, 36 daugher-in-laws and over 1000 Grandchildren.



Sindhutai Sapkal





Azim Premii

Empathy-Altruism Hypothesis

The Egoist



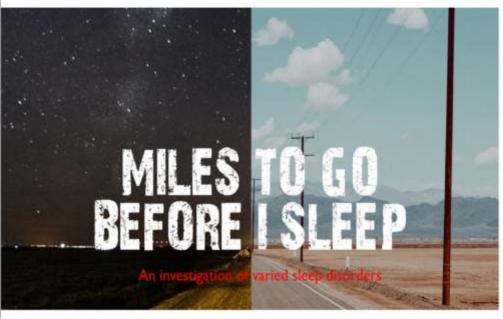
"Yuck! He's hideous and makes me feel bad. I should help him to make me feel better."

73 to 1

The Altruist



"Poor man, he must feel awful. I've got to help him so that he feels better."





SLEEP DISORDER

Madiha Fatma

2nd Year M.Sc. in Human Development

Sleep is essential for well-being just like food and water. Lack of sleep makes people worried. Poor sleepers are mostly bothered by their inability to sleep again the following night.

Sleep is a state of reversible unconsciousness during which the brain is less responsive to the external world. At night, a person goes through two types of

sleeps that alternates with each other. The Sleep cycle starts with Slow-quiet Sleep also known as Non-Rapid Eye Movement Sleep (NREM) during which the body temperature drops and the muscles relax due to drop in the blood pressure and the breathing rate. NREM is followed by Rapid-Eye Movement Sleep (REM) where the eye undergoes rapid movements and there is increased brain activity despite the fact that the person is still asleep. Dreams occur during this period.





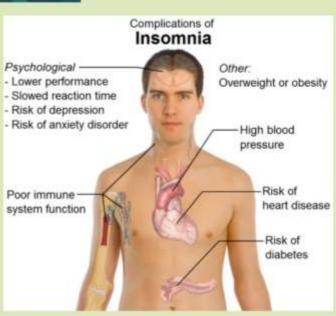
Complications of Insomnia

Sleep disorders are a group of conditions that affect the ability to of a person to sleep well on a regular basis. Most people occasionally experience sleeping problems due to stress, hectic schedules, and other outside influences. However, when these issues begin to occur on a regular basis and interfere with the daily life, they lead to a sleeping disorder.

While many problems related to sleep are minor, a larger number of major clinical problems that induces sleep disorder exist. Some sleep disorders are serious enough to interfere with normal physical, mental, social and emotional functioning.

Sleep disorder, or Somnipathy, is a medical disorder related to the sleep patterns of a person or animal. Sleep disorders are associated with the quality, quantity, timing and amount of sleep that causes problems in social, occupational, educational, academic, behavioral and other areas of functioning and distress during the daytime. In the 5th edition of American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorder (DSM 5), the disorders of sleep are classified as follows:

- Hypersomnolence: Characterized by excessive day-time sleepiness
- Narcolepsy: Recurrent episodes of irrepressible need to sleep.
- Breathing Related Sleep Disorders: Sleep disruption caused by abnormal breathing during sleep.



Circadian Rhythm Sleep Disorder: This sleep disruption that is primarily due to an alteration of the circadian rhythm or to a misalignment between the endogenous circadian rhythm and the sleep-wake schedule required by an individual's physical environment or social or professional



Hypersomnolence

Narcolepsy



Sleep Disruption



Circadian Rhythm Sleep Disorder



Parasomnias

schedule. Circadian rhythm sleep disorders all involve a problem in the timing of when a person sleeps and is awake. The human body has a master circadian clock in a control center of the brain known as the suprachiasmatic nucleus (SCN). This internal clock regulates the timing of such body rhythms as body temperature, alertness, appetite, hormone secretion etc. as well as sleep timing. People with circadian rhythm sleep disorders are unable to sleep and wake at normal times. They are generally able to get enough sleep if allowed to sleep and wake at the

times dictated by their body clocks. Unless they also have another sleep disorder, their

sleep is of normal quality.

Parasomnias: This is abnormal behavior during sleep and includes a range of conditions from sleep-walking and night terrors to sleep paralysis and bed wetting.

Lifestyle adjustments can greatly improve the quality of sleep, especially when they are done along with medical treatments. One can consider the following to overcome sleep disorders

- Add-in more vegetables and fish in the diet and reduce sugar intake.
- Reduce stress and anxiety through exercising.
- Create and adhere to a regular sleeping schedule.
- Drink less water before bedtime. 4.
- 5. Limit intake of caffeine, especially in the afternoon or evening.
- 6. Decrease use of tobacco and alcohol.
- Eat smaller low carbohydrate meals before bedtime.











The sleep therapy market in India stands at 80 crores and is growing at the rate of 20 per cent. Inspite of this, research on sleep disorders in India is limited The development and exacerbation of certain sleep disorders, especially insomnia which constitutes majority of the sleep disorders in India, can be prevented and controlled to quite an extent through lifestyle changes and better sleep habits.

TREATMENT FOR SLEEP DISORDERS



Ayurvedic Therapy

Shirodhara is a form of Ayurvedic therapy that involves gently pouring liquids over the forehead and can be one of the steps involved in Panchakarma. It has the following benefits:

- · It gives peace of mind and improves memory.
- · It relieves stress, anxiety, tension, worry fatigue and depression.
- · It solves sleeping problems like insomnia or shift work sleep disorders (SWSD).
- · It helps cure hair loss.
- · It helps to relive jet leg.



Ayurvedic Sleeping Pills



Continuous Positive Airway Pressure (CPAP)



Sleep Music

Ayurvedic sleeping pills or Aaram capsules containing common herbs like Brahmi, Sarpgandha, Bhangrava, Chandan and Tagara may be used to cure sleep disorders

Sleep Apnea patients can wear a CPAP face or nasal mask that is connected to a pump, provides a positive flow of air into the nasal passages in order to keep the airway open during sleep.

Music is more than something that's simply enjoyable to listen to. It has a direct effect on the parasympathetic nervous system, which helps your body relax and prepare for sleep. Music with a tempo of around 60 beats per minute has a profound impact on calming the mind and helps in nodding off.



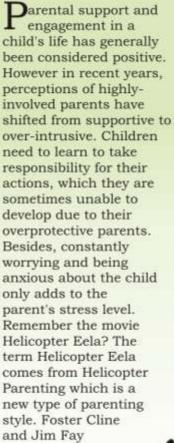
HELICOPTER **PARENTING**

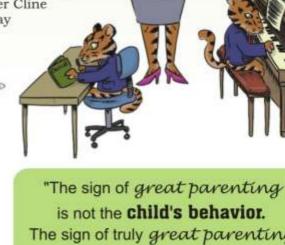
Muskan Rathi

2st Year B.Sc. (Human Development)

coined the term "helicopter parent" in 1990. The term "Helicopter Parenting" gained wide currency when American college administrators began using it in the early 2000s as the oldest Millennial began reaching college age.

The term 'Helicopter Parent' has been used to refer to parents who are over-solicitous and apply developmentally impairing tactics to their sons and daughters who are otherwise able to assume autonomy. These "helicopter parents" are depicted in popular media as meddling entities, constantly hovering over their young adult child in areas of decision making, academic studies, and social relationships. This involvement stops benefitting the child and some believe it could be interfering with their learning and development.





is not the child's behavior. The sign of truly great parenting is the parent's behavior."

-Andy Smithson

Helicopter parents may hover over children of any age. "In toddlerhood, a helicopter parent might constantly shadow the child, always playing with and directing his behavior, allowing him zero alone time," said Dr. Dunnewold. In elementary school, helicopter parenting can be revealed through a parent ensuring a child has a certain teacher or coach, selecting the child's friends and activities, or

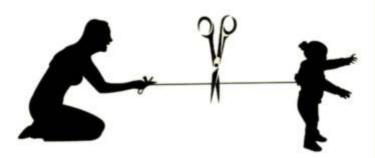


providing disproportionate assistance for homework and school projects. Even at elder ages, a lot of parents like keeping a control over their children. This further is said to cause discomfort to their child and lead to problems between the child and the parent. But this is not necessarily the case with small children. Looking more closely into the research on helicopter parents, it has been found that helicopter parents can positively affect the academic success of their children, positively affect the forming of their children's character, but can negatively affect their children's mental health.



- Doing things for children that they are capable of doing for themselves.
- Doing all their housework and not requiring kids to do chores
- Constantly checking on children by phone calls, emails or text.
- Secretly following them and watching them.
- Not allowing them to go anywhere alone.
- Forbidding anything perceived to be potentially dangerous such as sports or riding a bike.
- Constantly warning about stranger danger and not allowing children to go on activities with peers such as sleepovers.
- Running police checks or hiring private eyes to investigate the people involved in their children's lives such as teachers or neighbors.

'Helicopter parents' tend to think that they are doing what is best for their offspring by ensuring their success and happiness. As much as most parents are overprotective, there is a limit to when it becomes too much. Being a parent that is always there for their children is one thing, but aiding them with every single situation that they go through is not always the best route. However, the best intentions may not always produce the desired effect.



Check list for Parents if they feel that they follow Helicopter Parenting.

- You fight your child's battles
- You do their school work
- You are overprotective
- You maintain your child's schedule
- You make choices for your child
- Yelling out directives

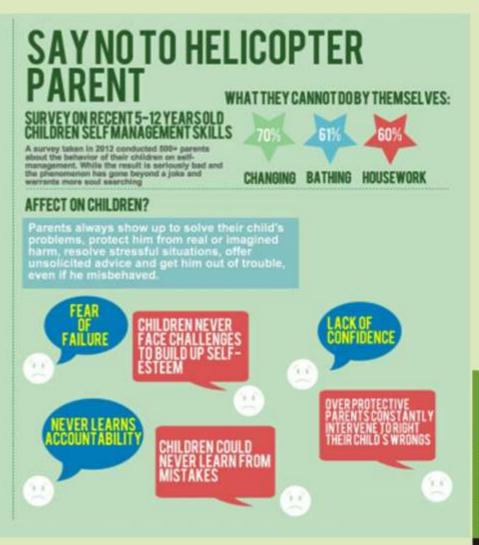
Dr. Rachna Khanna Singh, HOD-Holistic Medicine & Psychology, Artemis Hospital, Gurgaon, explained, "Helicopter parenting is not good. That said, the generation gap is only becoming wider with each day, thanks to the digital age. Children are becoming adults very fast, and it becomes difficult for parents to cope. There is growing insecurity among them, which is why they tend to be overprotective". Loving and supporting your child is one thing, controlling his or her life is another and it can only throttle the child's individuality.

In a study by Zihniye Okray, 2016 on "Helicopter Parenting and Related Issues: Psychological Well Being, Basic Psychological Needs and Depression on University Students" it has been seen from the results that helicopter parenting style make children more prone to depression in their emerging adulthood period. Also helicopter parenting leaves scars on their self-esteem making them more dependent on their families.

There is a fine line between parental involvement and over-parenting. The parental involvement might be a boost up, support that children need to build their own confidence and abilities but over-parenting leads to many different things which can make their child totally dependent on them. Media has tagged helicopter parents with various synonyms such as "hovercraft", "humming birds", "stealth fighters" and "black hawks".

The ultimate aim of parenting is to develop qualities that help children to live as humanly as possible. The parents must realize that children must eventually be free to take their own decisions and be independent. Helicopter Parenting is yet to prove very helpful is this regard.





EFFECTIVENESS OF ASSISTIVE TECHNOLOGIES FOR CHILDREN WITH SPECIAL NEEDS

Anwesha Pal

2nd Year B.Sc. (Human Development)



Assistive technology is defined as "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized used to increase, maintain, or improve functional capabilities of a child with a disability". People who have disabilities often have difficulty performing activities of daily living (ADLs) independently, or even with assistance.

ADLs are self-care activities that include toileting, mobility (ambulation), eating, bathing, dressing and grooming. Assistive technology can improve the effects of disabilities that limit the ability to

perform ADLs. The Individuals with

Disabilities Education Act, 2004 (IDEA) mandates that "every child must be considered for assistive technology".



The WHO global disability action plan 2014-2021 is a significant step towards achieving health and well-being and human rights for people with disabilities. The action plan calls to remove barriers and improve access to health services and programmes; strengthen and extend rehabilitation, assistive devices and support services, and community-based rehabilitation; and enhance collection of relevant and internationally comparable data on disability, and research on disability and related services.

Assistive technologies are often promoted to schools, parents and educators as tools to assist students with special needs by providing a compensatory value, to remediate learning problems and to promote personal independence. These technologies range from simple spellcheckers to more complex speech recognition systems and







Bathing



Dressing



Transferring



Toileting



Walking or moving around

educational software. Many research projects have examined the effectiveness of these assistive technologies - primarily in terms of their remediation and assistive functions.

Findings indicate that when students with physical, intellectual and developmental disabilities uses assistive technology such as iPads, software, speech generators, electronic notebooks, and computer-assisted instruction, there was an increase in academic achievement (e.g. spelling or writing skills) and an increase in student engagement or the improvement of a skill after a student with a disability used a particular technology.

These technologies may be effective for one student; however, it may not be effective for another student with the same disability. Even students with the same disability may not have the same preferences, success, and challenges regarding AT. When making decisions about AT in the classroom, teachers must consider the unique, individual needs of the students and be willing to provide support through prompting alongside the assistive technology. Some examples of assistive technologies are:

Mobility Aids: such as wheelchairs, scooters, walkers, transfer devises canes, crutches, prosthetic devices, and orthotic devices. Hearing aids to help people hear or hear more clearly.







Screen Reader: Screen readers are used to help the visually impaired to easily access electronic



information. These software programs run on a computer in order to convey the displayed information through voice (text-tospeech) or Braille in combination with magnification for low vision users in some cases. One example of screen readers is Apple Voiceover. This software is provided free of charge on all Apple devices. Apple Voiceover includes the option to magnify the screen, control the keyboard, and provide verbal descriptions to describe what is happening on the screen. There are thirty languages to select from. It also has the capacity to read aloud file content, as well as web pages, E-mail messages, and word processing files.

Electronic Worksheets: Students with learning disabilities like dyslexia can use

electronic worksheets to complete their assignments. These worksheets help students to line up words, equations and numbers on their assignments. On some of the worksheets, text-tospeech or speech synthesizing technology is also available.

Refreshable Braille

Displays: A refreshable Braille display or Braille

terminal is an electro-mechanical device for displaying Braille characters, usually by

means of round-tipped pins raised through holes in a flat surface. Computer users who cannot use a computer monitor use it to read a Braille output version of the displayed text.

Wearable Technology:

Wearable technology is a smart electronic device that

can be worn on the body as an implant or an accessory. New technologies are exploring how the visually impaired can receive visual information through wearable devices.









Phonetic Spelling Software: For many children with learning disabilities, reading and writing can be a challenge. Phonetic spelling software is designed to automatically convert the student's typing into the word that they intended to write. For alternative reading options, students



can always check out audio books. With the audio book, students can follow along in their text and overcome reading difficulties.

Talking Calculators: Students who have dyscalculia can benefit greatly from a talking calculator. The gadget makes it easier to check assignments, read numbers and perform calculations. While the talking calculator is a fairly simple tool, it offers an exceptional benefit for students who would otherwise struggle in math classes.

Variable Speed

Recorders: Everyone has a different learning style, and

different learning style, and many students struggle with understanding auditory lectures. In essence, the student just has to hit record while they are in class. Afterward, the recording can be slowed down or sped





up for the student to listen to it again and again. If the pitch of the recording is hard to understand, students can modify the pitch up or down to make their lectures more accessible.

Videotaped Social Skills: Autistic children and other children with learning disabilities may struggle to figure out normal social



interactions. In the past, the most common way to learn social interactions was to practice them. Unfortunately, many children inadvertently behaved inappropriately as

they tried to learn what defined "normal" social interactions. With videotaped social interactions, students can learn important life skills and social behavior. In addition to interpersonal skills, these videos can work for self-help, linguistic, academic and emotional problems as well.

Memory Aids: Memory aids are any type of assistive technology that helps a user learn and remember certain information. Many memory aids are used for cognitive impairments such as reading, writing, or organizational difficulties. For example, a Smartpen records handwritten notes by creating both a digital copy and an audio recording of the text. Users simply tap certain parts of their notes; the pen saves it, and reads it back to them. From there, the user can also download their notes onto a computer for increased accessibility. Digital voice recorders are also used to record "in the moment" information for fast and easy recall at a later time.

Assistive technology is also majorly used in

sports. It is an area of technology design that is growing. These devices are created to enable sports enthusiasts who have disabilities to play. With the availability of these devices,



sports for people with disabilities have changed from being just a clinical therapeutic tool to an increasingly competition-oriented activity. Hopefully, the days are over when disabled students are shunted off into isolated classrooms, without the ability to participate in the regular routines of education and develop social relationships with their peers.

The key feature of contemporary computer-based educational technology is that it is focused on accessibility and offers almost limitless flexibility, making it adaptable to all varieties of disability. The usage of assistive technologies by children with special needs also redefine their interactions and contribute to their self-image. If these technologies are perceives as stigmatizing, it might become stressful and will adversely affect their self-esteem and sense of participation. Thus, it is to be ensured that children with special needs are able to enjoy all the benefits of education, expand their intellects and abilities and potential for meaningful employment.



WALMART'S ACQUISITION OF FLIPKART

A GOOD DEAL FOR E-COMMERCE IN INDIA

Nidhi Bohra, 2nd Year B.Com (D)

The trend involving two companies merging together, or one company acquiring another and running the operations have helped in technological up gradation, better production and most importantly, better market share. The dynamics of a merger becomes even more interesting when a company known to be the world's retail giant acquires another company which in its only eleven years of operations becomes the largest e-tail platform in the country of its origin.

The Walmart's acquisition of 77% stake in Flipkart is one of the biggest mergers and acquisitions deal in the global economy. Walmart and Flipkart announced this merger on 9th May, 2018. The \$16 billion deal had a great impact on the stakeholders of both the companies, particularly those belonging to Flipkart.

Both the companies had their own reasons for joining hands together. Walmart was established throughout the world and had its retail stores everywhere except in India where its biggest rival, Amazon remained at a very strong position with a market share of 35 percent. As per the Government's FDI policy, it was nearly unimaginable for

Walmart to open its own stores in the Indian market. Therefore the best Walmart could do was to tie-up with a company already having a large market share in country.

Flipkart, on the other hand was a big Startup Company in the Indian ecosystem and there was a requirement for a strategic investor to back the losses. Moreover, it was required that Flipkart go offline and have retail stores as initiated by its biggest competitor, Amazon. The latter through its project. Udaan had several retail stores in the urban parts of the country. To go offline, Flipkart needed the expertise to set-up retail stores strategically in various parts of the country. No company other than Walmart could help Flipkart in this. The merger involved Walmart, a retail company to tie-up with urban and semi-urban retail stores for supply and sale of food items and groceries, and these items would also be sold online through Flipkart.

In this way, each of the two companies had their sets advantages through the merger. Walmart on one hand gained a large customer base; whereas Flipkart attained better research and development strategies. The deal was also in line with the Government's FDI policy and despite protests by traders; it was approved by Competition Commission of India.

The deal also had a huge impact on the urban and semi-urban retail stores. It lead to an increase in the revenue for shop owners and provided the customers with quality products at their doorstep apart from attracting other foreign companies to invest in Indian companies, a trend that had slowed down after demonetization. This foreign investment would lead to better technological skills coming to the country thereby leading to better production aspects and better avenues in marketing techniques. The deal further greatly benefitted the Flipkart employees as they made windfall gains through the stock option plans.

In a country with a customer base of 1.3 billion people, it is estimated that this merger would increase the number of online buyers from \$48.9 million at present to \$74.7 million in 2020. Consequently, the online spending in India would also increase from \$116.3 billion (at present) to \$167.8 billion in 2020 thereby helping the Indian ecommerce sector to grow immensely and enable India to evolve as a knowledge hub and incubator of global retail trends.







SOCIAL MEDIA INFLUENCERS

A NEW FORM OF MARKETING

Pooja Yadav, 2nd Year B.Com (A)

Currently there are several social media platforms like Instagram, Facebook, Pinterest, Twitter, Musically and many more, where some people have the word 'Influencer' written in their bio-data. An influencer is an individual who has the power

to affect purchase decisions of others because of his/her knowledge, position, or relationship with his/her audience. Influencers are primarily categorized as micro bloggers (you-tubers), celebrities and industrial experts/ leaders.

Social media influencers have access to a large audience belonging to different backgrounds of the society. The upward rise in influencers is closely linked to the rise of the social media platforms.

Influencers are ordinary people but who have a

but who have a substantial 'following' in the social media due to their expertise and reliability, which they market to the masses. These individuals are not simply marketing tools, but rather social relationship assets with which brands can collaborate to achieve their marketing

objectives. This will allow the brands market penetration that is far deeper than possible with other traditional forms of advertising/marketing.

This is a strategy that
has already been in use
for ages and there are
numerous examples of
advertisements featuring
famous Hollywood and
Bollywood actors
recommending a certain
luxury product.

Brands purposely seek out influencers who create content that subtly pushes a

product or service, weaving in

these brands delicately into the content that these



influencers serve. Influencers do not only drive audiences to the brand-page by advertising to their following, they also create word-of-mouth communication of the brand in comparison to direct advertising. Like any other successful relationship, the partnership between these brands and influencers is mutually beneficial. The company successfully reaches their target audience; while the influencer earns and continues to increase their followings.

More and more companies are turning towards this marketing strategy that enables them to grab the attention of the millennials, who are less receptive to traditional marketing techniques. 'Influencer-marketing' increased by 325% in Google searches in 2017 making it the fastest-growing online acquisition method of the year. On an average, in the following year, marketers were expected to invest an average budget of \$25,000 to \$50,000 into multifaceted influencer campaigns.

The biggest platform for influencer marketing is found on Instagram. In 2018, Instagram saw a whopping 12.9 million brand-sponsored influencer posts. What really sets social media influencers apart from other types of endorsers is their reliability. Despite having a large popularity and internet following, influencers are still perceived as mostly normal, down-to-earth people, this relatability being such an important aspect that one could consider this a product in itself.

Influencers play a major role in marketing of a large variety of goods. In the world of internet, consumers explore brands, read reviews, descriptions about any product they desire to purchase and know if it is worth their hard earned money or not. In this situation influencers play a vital role.

As per the survey conducted by the student, 70% of the respondents make purchases based on online recommendations, and 52% people have their favourite influencer. 70% of the Youtube subscribers trust influencer opinions over traditional celebrities, and 86% of women turn to social networks before making a purchase decision thereby highlighting the importance that a consumers places on such reviews.

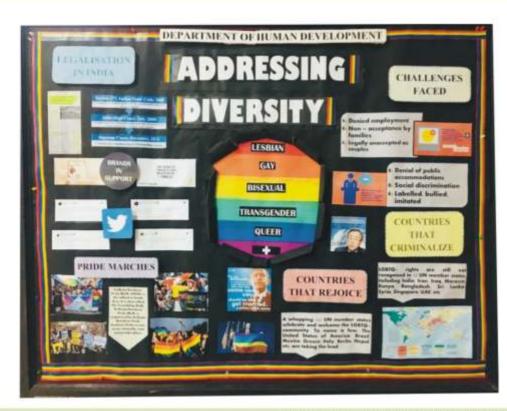
The use of social media influencer marketing in lifestyle public relations initiatives has broken the wall between the consumer, the brand, and followers through social media content.





BULLETIN BOARDS

Students are encouraged to research on raging societal issues and put the collected information in the form of bulletin boards at the campus to share the information. Information and awareness boards on the following themes were put-up by students.



Addressing Social Diversity by HD students





A HOME FOR THE HUMBLE GIANTS

Astha Agarwal 1" Year, M.Com Pinnawala Elephant
Orphanage (PEO) is an
orphanage, nursery and captive
breeding ground for wild Asian
elephants located at Pinnawala
village, 13 km northeast of
Kegalle town in Sabaragamuwa
Province of Sri Lanka.

The Orphanage was established in 1975 by the Sri Lanka Department of Wildlife Conservation (DWC) to care and

protect the orphaned unweaned wild elephants found wandering in and near the forests of Sri Lanka.

With the cultural background of treating human and animal alike in their distress,

PEO started off with five abandoned baby elephants. The

tragedy with misplaced calves is that they cannot survive on their own as they suckle from their mother until they are almost five years old. They thus need to be hand raised to ensure their survival.

Young elephants sometimes fall into pits and ravines in their search for water during



drought seasons. Other are displaced from their wild habitat due to developmental projects are abandoned before weaning is complete, diseased or wounded. Forty-eight mahouts at PEO take care of these elephants by providing shelter and care.

The elephants are fed in their stalls with large quantities 250 kilograms (550 lb) of jackfruit,



coconut, kitul (sugar palm), tamarind and grass every day apart from 2 kg (4.4 lb) of rice bran and maize.

The female and

young elephants are allowed to roam freely during the day in an area covering a few acres. They are herded twice a day and bathed in the river. Adult male-elephants are also made do some light work such as transporting the feed. Some of them are also given to the temples for the service.

Most of the elephants at Pinnawala are healthy and once attaining adulthood are retained within the facility. Pinnawala Elephant Orphanage was the subject of a 2010 report by the Born Free Foundation which called into question animal welfare at the orphanage.



Quality of care of elephants that are donated from Pinnawala has been a big public issue. In 2012 The Sri Lanka Environment Trust spoke out against authorities who continue to 'donate' tamed elephants to people who had 'poor' past records of taking care of animals. Despite these accusations it was proven that the surveillance was done by the fact that four of such donated elephants by presidential decree were returned by a court order.





GROWTH HACKING

Srijita Pal

3rd Year, B. Com (H) (Specialization in Accounting & Finance) The boom of digital marketing has been both a boon and a bane. It made advertising accessible to infant brands that lacked financial resources and helped them create their own community of loyal consumers.

Websites find it difficult to attract users unless their services are available for free. This has led to the growth in advertising tools like AdSense and websites are renting out space on their page to those who want to advertise. This has led to multitudinous advertisements and has desensitized consumers towards such ads. What now thus remains is a just cliche of a marketing technique, whose results are underwhelming.

The combined popularity of different brands, both big and small is so high that it almost mutes the small and new brands. This has given rise to a new a marketing trend called 'Growth Hacker Marketing'. This form of marketing harps on the concept of jugaad. Marketers now look to do the bare minimum without having to spend big amounts to run elaborate ad campaigns. Product promotion is moving away from the traditional approach that is akin to the release of a blockbuster movie to that of a niche independent movie. This technique is useful for companies

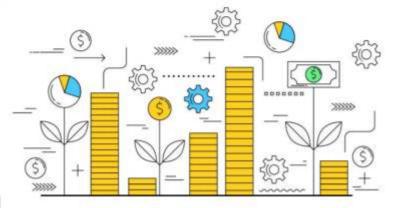
that do not have an excessive budget for advertising.

Traditional sources of marketing such as television ads, billboard and print media do not provide definite method of calculating the return on investment through the campaigns. While there maybe an increase in sales or tete-à-tete regarding a brand in the social media for a company following the traditional strategies of marketing, it still may not have the analytics to decide whether the campaign was successful or otherwise.



Growth Hacking, in the modern day, uses only those tools that are 'testable, trackable and scalable'. It does away with the notions of 'building a brand' and 'creating a conversation' and other vague terms. The end goal of a growth hacker is to create a sustainable advertising technique so that it is frugal. It is unique and it provides analytics so that you can assess the ROI of the method.

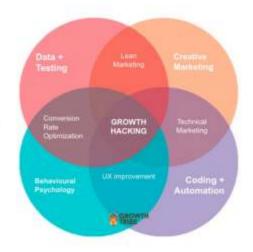
One of the earliest examples of Growth



Hacker Marketing is Dropbox's invitation system. Dropbox is a cloud solution that provides its users with space on their cloud server. Back in 2008, when the service was launched, users were allowed to sign up to their services only by way of an invitation link. This system provided incentives to users sharing their invitation links in return for free space on the server along with another 10 GB space. This helped in bringing new users, it gave incentives to existing users to share the link and since it was one of the first players in the concept of cloud computing, it educated the masses. The company could have opted for traditional methods of marketing their product both online and offline. This gave the company more recognition amongst the masses; however that would be useless because something like a cloud storage service would be irrelevant to a majority of the consumers of an all pervading ad-campaign.

Growth Hacking emphasizes on identifying the niche market and then marketing the product to this market such that the ROI is high. It begins with product market fit. As has been emphasized by Philip Kotler in his numerous books, unless the product or service is something that consumers want, it will not sell. Growth Hacking relies on the assumption that the product or service being provided is so compelling that the product, with only a gentle push, will be advertisement for itself. This can be especially seen in the

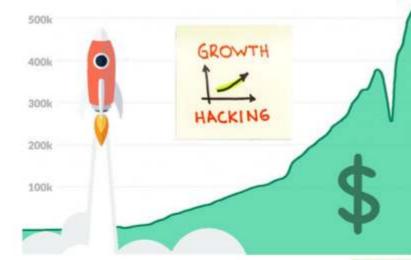
case of Airbnb.
When Airbnb
started, it did
not have an
advertisement
budget; the
company
simply
modified itself
according to
the wants of its



users. Another example could be Snapchat; Snapchat has never run one advertisement campaign, yet it keeps growing as a service.

While talking about Growth Hacking, it would be remiss to not speak about Ryan Holiday's contributions. According to the book "Growth Hacker Marketing: A Primer on the Future of PR, Marketing and Advertising" the author mentioned the jobs of Marketing Heads of companies will be replaced by the designation of a Growth Hacker, a move that has already been implemented by companies like Facebook, Twitter, Evernote and The Huffington Post.

In a world where "minimalism" is now a "fad", it only makes sense for this "fad" to seep into



marketing tools too. After all marketing creates these fads and it is only meta (self-referential) that a fad becomes the way of the very device that birthed it. The minimalism in Growth Hacking is its frugality and in an economy where most companies are bleeding, it is either embracing Growth Hacking or bleeding without any results.



THE FUTURE IS FEMALE

Srijita Pal

3st Year, B. Com (H) (Specialization in Accounting & Finance) 2018 witnessed, God is a Woman by the pop artist Ariana Grande. Once it was released in the internet it went viral. Conservative hardliners from all around the globe argued against the truth of that statement and some even going as far to calling it blasphemous. This led to the emergences of a new term i.e. TFIF- The Future Is Female.

Women have increasingly been shattering the glass ceiling in the corporate world and in terms of holding highly powerful positions. Be it in the running a company or being in charge of the World Bank, or having to spearhead what could change the face of European and British history with Brexit, nothing stops women from taking risks.

While we speak about powerful women, it would be remiss not to talk about the new wave of entrepreneurs that are steadily changing the face of the Indian market. Women have been entrepreneurs since time immemorial. We have seen instances of women having their

own businesses where they sold pickles, papads, laddoos and other such food items. State vocational centres have been seen to employ a large number of women. However, it is only now, that women have been given their due acknowledgement.

Artificial Intelligence is quite the hype amongst start-ups, especially now, when companies and venture capitalists are in a mad scramble to invest in companies working on artificial intelligence. Meghna Saraogi, formerly a graphic designer had integrated this technology to her app called MirrAR. This app uses augmented reality and artificial intelligence to give its users instant fashion advice, which is crowdsourced from all around the globe with the help of instant polls. It received seed funding from Indian Angel Network and now works in partnership with Tanishq.



Ashwini Asokan is
the founder and
CEO of Mad Street
Den, an Artificial
Intelligence
company, powering
the retail industry
with its image
recognition
platform, Vue.ai,
The company is
headquartered in
the Bay Area,
California with
offices in Seattle

and Chennai (India). Vue.ai works with marquee retailers, brands, and marketplaces across the globe, transforming the fashion industry's operations through intelligent automation. Mad Street Den's backers include Sequoia Capital, Exfinity Ventures, KDDI - Global Brain Japan, and Rocketship VC. Ashwini was featured on Fortune's under 40 list apart from over 100 publications including Forbes, TechCrunch, Nikkei, and Vogue.

Twenty six year old Prukalpa Shilpa, cofounded SocialCops, a data intelligence
company. The company recently launched the
Business4SDGs monitoring dashboard that
will help businesses of Papua New Guinea
measure their contribution towards the
country's progress towards the UN
Sustainable Development Goals. The
company was launched in 2013 and since
then has been assisting the United Nations,
the Bill and Melinda Gates Foundation, the
Government of India, Unilever and McKinsey
& Company in managing their data.



Padmaja Ruparel started the Indian Angel Network in 2009. The angel network has over 130 investors and has invested in various companies. Padmaja has been a key figure in the Indian entrepreneurial ecosystem from

the time she set up TiE Delhi Chapter which was the first TiE chapter in India. A key figure in the Indian entrepreneurial ecosystem, Padmaja also revived the Indian Venture Capital Association, only to step out of an ever-waxing corporate life to operationalise a band of angels in the form of IAN.

Nykaa.com is a website that has changed the face of the beauty industry in India. Not only has it brought cosmetics to the doorstep of its customers, but also made international brands accessible to Indians. It was founded by Falguni Nayar in



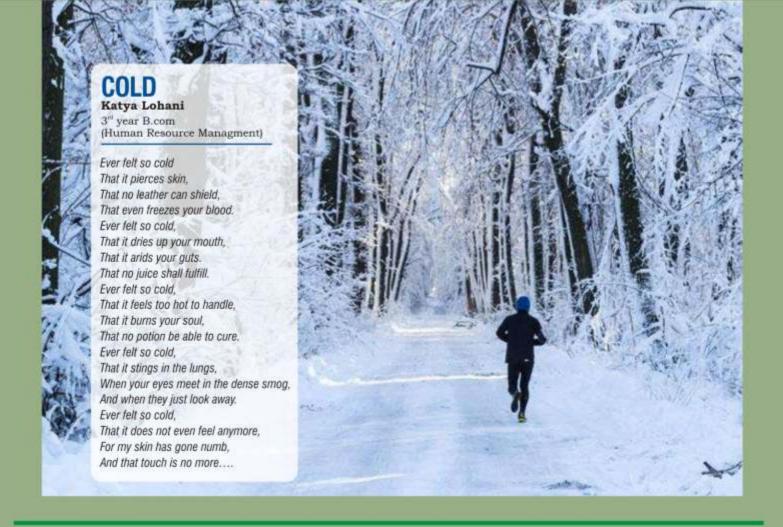
2012 and it helped break the myth that retail e-commerce and the beauty industry do not go hand in hand. Nykaa is among the few ecommerce companies that are inventory-led. The company now has its own inventory space of 50,000 square feet in Delhi and Mumbai

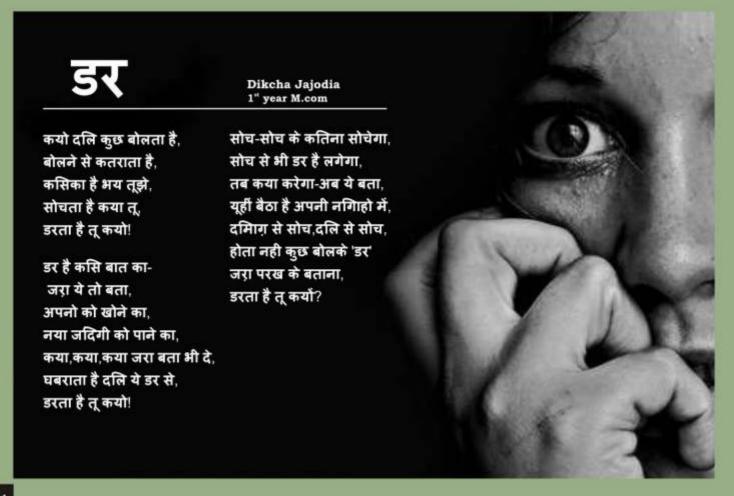
each, and another 15,000 square feet in Bengaluru.



Anuradha Acharya founded
Mapmyygenome in 2011. The concept was to inculcate a healthier life by analysing an individual's genetic report and health history and combining it with genetic counselling. She was awarded "Young Global"

Leader" by the World Economic Forum in 2011.





EK NARI

Prachi Baid

2nd Year B.Sc (Human Development)



वहीहैमाँवहीहैसास वहीहैबेहेनवहीहैजीवनकीआस चोटलगेतोहपहलानाम अच्छेकामकरनेसेदेतीइनाम रोजसुबहसेराततकघडीकेकाटोसाचलनाजसिकाकाम हरअदाकोमीठीसीम्सकानकेसाथनिमानेऔरनकरनाएकपलभीआराम। रक्षाबंधनकेत्यौहारकोत्यौहारबनाये छोटेभाईकेसारेहोम-वर्ककोअपनाबनाये गृहस्थीकेकाममेंपूरीतरहसेहाथबटाये नर्भयहोकरदेशको आगेबढाये। बहुकोबेटीबनाकरसवारना घरकोहरआंचसेबचाना समाजसेलडकरमाकनकोघरबनाना सुखशांतिकागीतहरसदस्यकोसुनना। फरिक्योंहमबेटियोंकोराहनहींदिखाते क्याँउन्हेंहरबारबेटोसेकमहैमानते युगहैयहहमारा ,समयहैहमारा एककदमआपकाएकहमारा।

ESCAPE

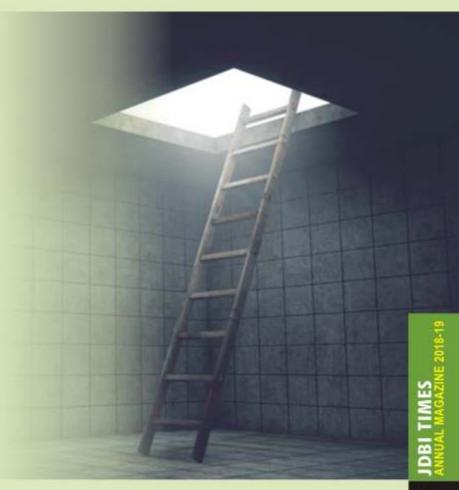
Lipika Kochar

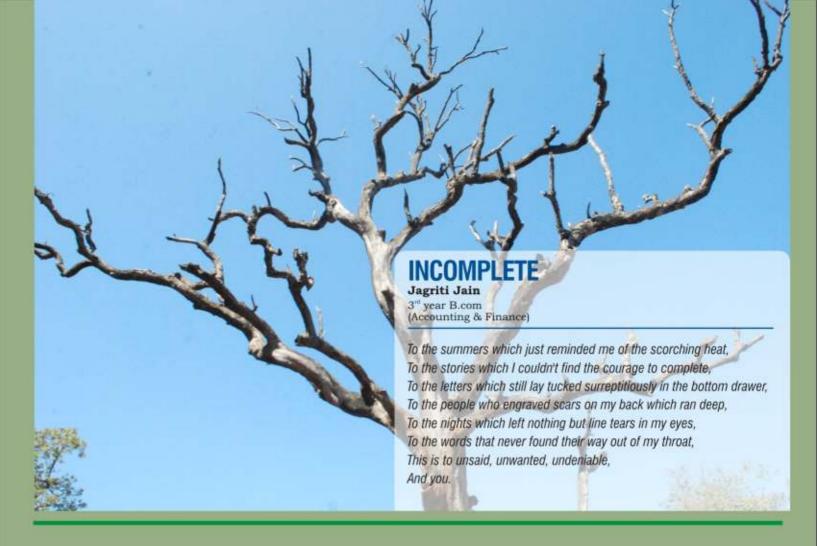
2" year B.Sc (Food Science and Nutrition Management)

She was eight and used for trade All she asked for was ESCAPE

Escape from the world of men
Escape from the days of torment
Escape from the night of fright
Escape from the place where human
barter is right

To heal the skin touched To heal the mind hurt To heal the soul dumbed To heal the heart numbed All she asked for was escape.





INK DRIPS

Nandini Bhatter

1" year B.com

Ink drips, on the paper.
No longer makes sense.
Lost the word to give it shape
I have lost confidence.

Shredded paper of untold stories
Piling up in lots.
Messed up vision and broken dreams
Dying in my thoughts.

Black fumes of incineration Poisons as it must. Ideas once screaming now have Settled with the dust.



Fueled by the misery
Of times I have been in pain.
So along with them something else
Deleted from my brain.

Troubled soul, a stormy mind.
It no longer matters much.
Broken pencils, scratch and cuts
I have somehow lost the touch.

Let's take a BREAK!!

Katya Lohani

3" year B.com (Human Resource Managment)

I dusted my backpack,

I filled in my clothes.

It had been so long.

Since I hit back on the roads.

Some phone calls, a few bookings done,

And those two had no choice,

They had to tag along.

This break was needed,

Indeed life had been so rough.

The work, the stress, everything added,

The mind asked to give up.

Let's take a break from our work,

That robotic unpleasant routine,

We follow every day.

Let's take a break from choices.

Choices that we make everyday,

To make living better.

Let's take a break from thoughts,

From thinking hard inside,

And rusting out our mind.

Let's take a break from life,

And live it as it was meant to be.

My paid holidays weren't over,

Nothing much to worry about.

We kicked in the car.

The journey started out n loud.

I was in the rear seat.

She forcefully took the wheels.

He too couldn't do much.

We both just giggled stupidly.

Planned ones had never happened.

Such sudden trips only worked with these jerks.

That to when me or her,

Wanted that lazy dog to tour- around.



REALISM

Prachi Baid

3" year B.com (Human Resource Managment)

> I remember a day of a long time ago, Where i was a little girl aged 8 or so. On the stage for my dancing competition, Where i was soon to get recognition. And here it was my name announced, This made my elder sister shout out loud. She is my sister!

Every girl in this world is a priceless gift of god.

Who is made to live life as much as the odd,
But in this world where headlines are rapes,
And on repeat we see the fairy tales.
Let's see what this place has come to,
Let's see what our place has come to.
With the rising bars of girls' dreams,
With us and not only me.

We can help find the meaning of feminism. We can help find the meaning of realism.



MOM

Sakshi Agrawal

1" year B.Sc (Food Science & Nutrition Management)

> You helped me in every way, With every step I took, You were with me In my every time of Day.

I never told you how much I love You,

And you were always my Queen,
I know, I always bother you, prejudice on everything, but you never asked.

Mom, thanks for handling my Mood swings, When I went onto erroneous path,

You showed me the long, but the righteous path, Where, if I travel, I wouldn't hurt myself.

For every move I take and fall, you were onto my back, saving me from falling for the wrong path.

You made me learn how to fight with the world out there,

where there are knifes laid, and no "love" anywhere.

I, as a little one,

Always got angry and wanted to ask, "Why me"? But when I realized I knew that you were always right. I love you Mom and I always will?





मेरी माँ, सबसे प्यारी माँ

Vidhika Sonthalia

1" year B.Sc (Interior Designing)

लोग कहते है की, "भगवन हर जगह नहीं पहुंच सकते इसलिए उनहोंने माँ बनायीं " यह बात की सचुचाई अब मेरे सामने आई ॥ माँ, जन्म से लेकर आज तक, आपने ही मुझे सराहा है। मेरी हर बात की तह तक जाते हुए आपको ही पाया है।। जैसे खुशबू बिना फूल नहीं, उसी तरह माँ आपके बना मैं कुछ नहीं। जीवन का हर क्षण एक जैसा नहीं होता, पर माँ उन कुषणों में, आपके बिना मेरा क्या होता॥ आपने मुझे चलना सखािया, मेरी सफलता पर मुझे गले से लगाया।। मेरी हर आँसू को पोछकर, आपने मेरी हंसी वापस दी॥

बोझील समय भी आपके साथ हल्का लगताहै, वह समय तनाव दूर कर देता है ॥ आपके साथ बिताया हर क्षण, धरती पर स्वर्ग लगता है॥ मम्मी कहो या मोम, आपके है कितने सारे नाम, पर सबसे श्रेष्ट है माँ ॥ आपको याद करके हर कष्ट दूर हो जाता है। बताओ ना माँ, आपने कौन सा जादू है पाया? की यह शब्द मेरी जुबां पर सबसे पहले आया, सच, माँ के रूप में भगवान को है पाया ॥ मैं केवल आपको प्यार देना चाहती हूँ, आपका बेटी नहीं, बेटा बनकर दिखाना चाहती हूँ। आपका हर सपना पूरा करना यह वादा है मेरा।

क्योंक आप ही से तोह है मेरी खुशयों का डेरा ॥



THE KNIGHT

Prachi Baid

2st Year B.Sc (Human Development)

Think about the dark night, With the neighs of the knight. I've searched my soul but as I have tried, I find my religion unclassified. I believe in nature, laughter and love, And goodness, mercy and GOD above. The sun the rain the winds that blow, And a hundred earthly things that I think I know. But I don't fit in a civilised way, To the customs that people say. My heavens on earth it's; the things I share, With the entire human race yes I care! Once gone only ashes remain, I will be part of the earth, wind and rain. It's my everlasting it seems right to me, In the big scheme of life, it's the way it should be. As i think about the dark night, With the neighs of the knight. I find myself as part of the fight.



ROAD

Anoushka Sharma

1" Year B.Com

Sometimes you walk down the road
Which you don't want to
When you don't sit and look around
Somedays you barely move
Sometimes your affections too high to keep you from dancing

Sometimes you don't smile you don't eat When your eyes tell the tale With a stern face And a cover of slime on it Where as on other days your heart just leaps and bounds Sometimes you just don't reason out But there's fuel to keep you going Somedays you stare around and smile Somedays you can barely see When you pick up a leaf and understand how lifeless it is But then you realise how relatable it is Somedays faith sits on your shoulder and carries you around Somedays your enthusiasm just refuses to move around Somedays you imagination makes it all beautiful Somedays you imagination hates you of all Somedays you enjoy the showers of the nature Somedays you just lie down under the tree Somedays excitement is at its epitome Sometimes emotions hit you hard Sometime you just let it be

Because at the end you always reach your destination

But it is the walk which is always remembered.

THE FEAR I DON'T ACCEPT

Katya Lohani

3" year B.com (Human Resource Managment)

THE FEAR I DON'T ACCEPT What is it crawling in my heart. Instilling a strange fear deep within? What is it that flashes in my mind? Just as I close my eyes after that bye. What exactly is it that wants to make me, Make me go back and just give them a hug? A hug which conveys all what I feel, That brings out what I hesitate to say ever since. Maybe I know what it is, But still try to overlook, Because I am a big coward. A coward who does not accept. That this feeling of fear that I thought, To have left far behind long ago, That this feeling never left at the first place.



I feel afraid of growing up,
I feel afraid of those eyes,
Those wrinkling cheeks of my mom,
That have so large hopes already for me.
I feel afraid of growing up,
I feel afraid of that last touch,
That my father taps on my arms,
When the train is about to leave.
I feel afraid of growing up,
Of those responsibilities that I carry,
Without even being given one.
But somewhere I know it too,
That this fear is what drives me,
That this fear is what makes me mature,
That without it I won't grow...

SEMINAR ON GENDER EQUALITY



The Departments of Science & Commerce organized a Seminar on Gender Equality: Issues and Challenges on 23rd April 2019. Prof. (Dr.) Saikat Maitra Vice Chancellor, Maulana Abul Kalam Azad University of Technology graced the event as the Chief Guest.

Eminent speakers who deliberated at the seminar:

- Role of Education in Removing Gender Inequality: Prof.
 Dipa Dube, Professor, Law Department, IIT-Kharagpur
- Gender Equality in India: One Step Forward, Two Steps Backward: Prof. Vindhya Undurti, Professor, Tata Institute of Social Sciences, Hyderabad
- Protection of Women's Rights & Judicial Response:
 Ms. Chama Mookherji, Advocate, High Court of Calcutta
- Multiculturalism & Gender Equality: Prof. Kavita Panjabi,
 Professor of Comparative Literature, Jadavpur University
- Women's Economic Empowerment & Financial Independence: Ms. Sohini Chakraborty, Founder Director, SANVED, Kolkata

The event was hosted in association with the Telegraph. Other media partners were Prabhat Khabar and Channel 10.



Prof. Dipa Dube



Prof. Vidhya Undurti



Ms. Chama Mookherji



Prof. Kavita Panjabi



Ms. Sohini Chakraborty

NATIONAL KHADI DAY





National Khadi Day was celebrated by the Department of Textile Science, Clothing & Fashion Studies in collaboration with Khadi & Village Industries Commission (KVIC), Kolkata and Weaver's Service Centre, Kolkata on 1st October 2018 as an initiative to instill the spirit of Khadi among students.

Lectures on Khadi were delivered by eminent personalities:

- The Ecological, Sociological, Economical and Spiritual Aspects of Khadi by Dr. Soham Pandya, Ex-Director, Centre of Science for Villages, Wardha
- Handloom & Khadi by Mr. Tapan Sharma, Deputy Director, Weaver's Service Center, Kolkata on
- KVIC and its Activities by Mr. M Bandhopadyay, Executive Nodal Officer of cluster development program, KVIC, Kolkata
- Spirit of Khadi by Prof. V. Sakthivel, Professor, National Institute of Design, Ahmedabad.
- Khadi- The Trend Setter by Ms. Shweta Agarwal, Director, Shwets.



Dr. Soham Pandya



Mr. Tapan Sharma



Prof. V. Shaktivel, NID



Ms. Shweta Agarwal



Dr. Soham Pandya, Ex-Director, Centre of Science for Villages, Wardha and Brig. Chaturvedi inaugurating the exhibition



Exhibition on Khadi



Exhibition on Khadi



"Live demonstration of semi-automated Charkha by artisans of the Khadi Cluster, District Murshidabad



Bulletin Board on Khadi & Handloom



"Zaika India Ka"-a Sale of Indian food by the FSNM students

An exhibition on Khadi was set up by the TCFS students where dresses, products and posters related to cotton and silk khadi were showcased. Students of the Department of Food Science & Nutrition Management set up a Food Bazaar, Zaika India Ka.

An inter-college Bulletin Board competition on Khadi and Handloom Textiles and a Fashion Show on Handloom Textiles were also conducted by the TCFS students.

A live demonstration of spinning activities through semi-automated Charkha was arranged through KVIC by artisans of the Chak-Islampur Khadi Cluster, District Murshidabad.

A Vastra Haat (sale of handloom products) was set up by weavers from Champa, Chhattisgarh (Hemant Handlooms), Shantipur (Shantipur Lifeline Handloom Weaver's Welfare Self Help Group Society), Fulia (Namti Sarees, & Handloom Weaver), Katua. F-Studio (Kolkata).



Vastra Haat









Fashion Show on Khadi

KALEIDOSCOPE, 2019

(Graduating Fashion Show)



Kaleidoscope, their Graduating Fashion Show 2019 was organized by the Department of Textile Science, Clothing & Fashion Studies in association with the Indo British Scholars' Association (IBSA), Kolkata Chapter to commemorate British Council's 70 years in India at Raasmanch, Swabhumi on 15th February 2019.



Shri. Dinesh Trivedi, Member of Parliament graced the occasion as the Chief Guest.



Shri. Siddhart Birla and Smt. Madhu Neotia at the event



Eminent jury at the Show



Participating students receiving awards



Students also displayed the products designed and developed by them in association with traditional craftsmen from all over the country.



Exhibit-cum-sale of the artificial jewellery and bags made by the slum dwelling women of Rishra under NSS activity.















Theme: Revival of the Lost Glory

Theme: Reincarnation



Theme: Metamorphosis

Theme: Wonders from Trash



Theme: In Pursuit of Nature



Theme: Passage to India

In total 5 collections comprising of 11 designs were put up by 36 final year students.

- Revival of the Lost Glory (Revival of the Jamdani)
- 2. Reincarnation (Recycled T-Shirts)
- 3. Metamorphosis (Recycled Denim)
- 4. Wonders from Waste (Reduce, Reuse & Recycle & Recover)
- In Pursuit of Nature (Organic / Bio-Cotton)
- 6. Passage to India (Indo-European)

The ensembles were evaluated by a panel of jury that included Mrs. Sarbari Dutta, Fashion Designer; Mr. Abhishek Dutta, Fashion Designer; Prof. Sudha Dhingra Dean, National Institute of Fashion Technology, New Delhi and Mrs. Madhurima Nigam, Fashion Stylist our an Alumnus of the Institute.



Biodegradable Packaging by Mr. Bidhan Das, Deputy Director & Branch Head along with Mr. N. Nataraj, Assistant Director, from Indian Institute of Packaging, Kolkata.



DietPreneurs: Creating Opportunities by Dr. Swapan Banerjee, Owner, Diet Fitness and Ambition.



Nutritional Management for End-Stage Renal Disease & for Patients Undergoing Dialysis by Ms. Piyali Biswas, Senior Dietician, Medica Superspecialty Hospital.



Nutritional Management for Liver Diseases by Mrs. Arpita Ghosh Deb, Senior Dietician, Belle Vue Clinic.



Nutritional Management for Patients Suffering from Chronic Obstructive Pulmonary Disease (COPD) by Ms. Sanghamitra Chakravarti, HOD (Nutrition and Dietetics), Medica Superspecialty Hospital.



Nutritional Care of Cancer Patients by Ms. Reshma Ray, Senior Clinical Nutritionist, Tata Medical Center .



Nutritional Management in Rheumatic Disorders by Ms. J. Mira, Chief Dietitian, Rabindranath Tagore International Institute of Cardiac Sciences.



Management of Cardiovascular Disease by Dr. Sabyasachi Mitra, Cardiology Registrar, Department of Cardiology, Fortis Hospital, Anandapur.



Jute Non-Woven Materials by Dr. Sanjay Debnath, Principal Scientist, National Institute of Research on Jute & Allied Fibre Technology (NIRJAFT).



Textile Marketing Management by Dr. Shivaji Banerjee, HOD, Dept. of Management, St. Xavier's College.



All about Fashion Blogging by Ms. Lisha Jain, a Lifestyle & Fashion Blogger.



Insight into Fashion Industry by Mr. Arjun Agarwal, Director & Fashion Designer, Arjun Transworld Trends Pvt. Ltd.



Textile Composites by Dr. Manik Bhowmick, Scientist, NIRJAFT (National Institute for Jute and Allied Fibre Technology).



Sewing Threads by Mr. Raj S.J. Chowdhary, Head (Specialty Business), Vardhman Yarns & Threads Ltd.



Non-wovens by Mantu Basak



Fashion Styling by Ms. Neha Gandhi, a renowned Tollywood Fashion Stylist.



Vastu in Interiors by Ms. Pinky Kapoor, Vastu Consultant.



Idea & Design by Prof. Shubrajit Das, Associate Professor, Department of Architecture, Jadavpur University.



Clean Environment: Health, Hygiene and Sanitation by Dr. Tarit Roychowdhury, Associate Professor, School of Environmental Studies, Jadavpur University.



Project Management by Ms. Rupande Shah, Director of Rupande Shah & Associates.



Building Material by Brichitresh Saha.



Product Analysis by Mr. Santayan Sengupta, Industrial Design & Technical Consultant & Director, Thoughtshop Foundation.



Product Analysis by Mr. Pulaha Dasgupta, Industrial Design & Technical Consultant.



Cost & Estimation by Dr. Mainak Ghosh, Associate Professor, Jadavpur University.



Pre-natal Care by Dr. Gauri Kumra, Obstetrician Gynecologist and Infertility Specialist, Bhagirathi Neotia Women and Child Care Centre.



Developmental Issues During Infancy by Dr. Anjan Bhattacharya, Pediatric Neonatologist, Apollo Gleneagles Hospital, Kolkata



Cognitive Behavior Therapy by Dr. Snigdha Shaw Psychometrician & Counselor.



Substance Use & Abuse by Mrs. Nandini Choudhuri, Director, Crystal Minds.



Intellectual Disabilities & its Management by Dr. Lina Bardhan, Principal & Secretary Rehabilitation Psychologist & Special Education Consultant, Nobel Mission.



Power of Communication by Dr. Santanu Mukherjee, Consultant Speech Language Pathologist, Shine Speech & Hearing Institute.



Promoting Physical & Behavioral Health in Children by Dr. Abhijit Sarkar, Pediatrician, Bhagirathi Neotia Women and Child Care Center.



Attention Deficit Hyperactivity Disorder by Dr. Sujit Sarkhel, Associate Professor, Department of Psychiatry, SSKM Hospital.



Marketing Strategies to Bridge Gaps in Cultural Differences by Mr. Saibal Chatterjee, CEO, Lokenath Chatterjee & Sons.



Marketing Communication & Integrated Marketing by Dr. Ayan Chattopadhyay, Associate Professor, Army Institute of Management.



Integrated Marketing Communication by Prof. Sanjay Das, Professor, IIM Kolkata.



Role of Taxation System in Reinforcing Growth & Development by Chiranjib Das, Practicing Chartered Accountant.



Anger Management by Mr. Pradip Chopra, Chairman, PS-Group & ILead.



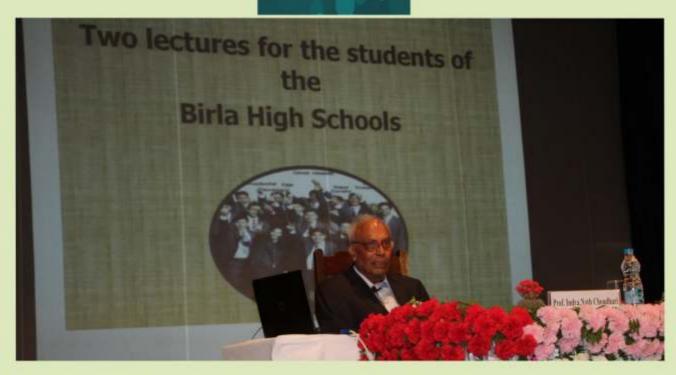
Consumer Behaviour by Dr. Soumik Gangopadhyay, Professor, ISB&M, Kolkata.



Digital Finance, Money Laundering, Accounting Scams & their Outcomes by Mr. Baljit Singh, Zonal Training Manager, Star India Dai-ichi Life Insurance Company Ltd.



Insolvency and Bankruptcy Code, 2016 and its Positive Impact on Banking & Economy by Mr. Chanchal Majumdar, General Manager (Credit Monitoring and Stress Assets), UCO Bank (Head Office), Kolkata.



Indian Culture and Civilization by Prof. Indra Nath Choudhuri, ICCR First Tagore Chair at the Edinburgh Napier University, Edinburgh & Secretary of Sahitya Academy and Minister (Culture), Indian High Commission, London for the students of the Departments of Science & Commerce.



Students watched the live telecast of Parkisha Pe Charcha on 29th January, 2019 where Hon'ble Prime Minister Narendra Modi interacted with 2,000 national and international students, parents and teachers at Talkatora Stadium, New Delhi.

During his interaction with students, Mr. Modi discussed various ways to handle stress related to exams. He encouraged students to aim big and equip themselves with education in order to face different challenges in life. Tips on dealing with depression, avoiding technology addiction and dealing with parental pressure were a few other points of discussion.

Teachers were asked to connect their teaching with real life situations and make learning enjoyable and practical.

CAREER COUNSELING

NMAT Exam,
Career Design &
Entrepreneurship
conducted by
Mr. Suhas Kaul,
Representative, Graduate
Management Admission
Council (GMAC)
for 3rd year B.Com
students.





Preparation for
CAT and Other Entrance
Exams for MBA
by
Mr. Sajal Mitra, Mentor,
Verbal Ability and
Mr. Abhishek Singhania,
Mentor, Quantitative Ability &
Logic, Erudite
for 1st & 2st year
B.Com students.



A chartered accountant's work involves auditing, taxation, accounting and financial planning. Chartered accountancy can be the first step to other rewarding careers in finance, investment consultancy and fund management.



One of the best benefits of food industry careers is the diversity. The culinary sector offers a number of career options that range from traditional positions like chef to new and emerging jobs like food forager. And the manufacturing sector presents opportunities for individuals seeking food science careers and other positions related to food processing.



The modern textile & fashion industry offers a broad range of career opportunities from raw materials processing to the design of apparel and furnishings. This sector needs skilled people as Pattern Masters, Cutters, Supervisors, Quality Controllers and Merchandisers. Fashion Designers can become a Makeup Consultant, Backdrop Designer or an Event Coordinator. Fashion Researcher and Fashion Forecaster are highly paid jobs in this field.



Space for residential and commercial places is shrinking due to rapid urbanization. This anomalous situation calls for professional help to make the living and working space more comfortable, beautiful and practical. Earlier, it was the task of an architect to do the entire exteriors along with the interiors of a house, office or any other functionally useful edifice. Now-a-days people have become more and more particular about the designs and the layout of the living or working area. This has led to an increasing requirement for professionals in interior designing. Although employment prospects are plentiful, setting up one's own business is also a very lucrative option in this industry.



Social workers enjoy a variety of employment opportunities and career specializations. They help individuals, families, and communities combat difficult or stressful life situations. They work in rehabilitation centers, schools, hospitals, hospices, and correctional facilities, and often cooperate with professionals in other social service programs. They may help children with behavioral disorders, families in poverty, or victims of domestic abuse.



Many countries from Europe are home to some of the top-ranked universities worldwide. According to estimates from the Europe an Union, there are around 45,000 Indian students in the continent at present. Germany has many different kinds of universities, all of which offer excellent quality of learning in diversified avenues of study. In France, there are more than 3,500 public and private institutes of higher education. Universities, Grandes Ecoles and schools of art or architecture: there is a wide choice for foreign students who want to study in France.

Department of Food Science & Nutrition Management



Vegetable Carving by Mr. Uddalak Mitra, Lab Instructor, JDBI



Cake Making by Ms. Shruti Agarwal, Alumni of J.D. Birla Institute and Founder of Baking Pleasures.



Food & Beverage Service Culture Industry Interface by Mr. Santanu Roychowdhury, Senior Lecturer, Guru Nanak Institute of Hotel Management, Kolkata.

Department of Human Development



Telling a Tale by Mrs. Shreya Biswas, Founder Katharangam, Bangalore.

Storytelling is the oldest form of teaching. A good and well-presented story is successful in reaching its objective and remembered long after over others. Reaching its listeners, holding the interest and crossing all age barriers is the impact of an effective storytelling. Knowing and applying the art of storytelling will not only strengthens the stories, but also develop the desired interest in the audience.

This art is as important for children as it is in business. Sharing stories, talking and singing every day help in a child's development - it sparks the child's imagination and stimulates his/her curiosity. It helps in the development of their intellectual, social skills and communication skills. For a business, a remarkable story can win over its audience and raise the perceived value of its brand.

Department of Textile Science, Clothing & Fashion Studies





Under a MOU with Avinashlingam Institute for Home Science and Higher Education for Women, Comimbatore, three 1st year M.Sc (Textiles & Clothing) students undertook a 10-day training programme from 12st to 22st June 2019. Students training in areas like spinning from waste cotton, viscose and their blends; circular knitting; thermal bonding and needle punching of fibres to make non-wovens. They also visited KG Denims Pvt. Ltd., SITRA, Kasthuri Sreenivasan Art Gallery & Textile Museum, Khadi India (Silk Weaving Section) during this training.

Department of Food Science & Nutrition Management



Annamrita (a Mid-Day Meal Community Kitchen)



D.I.S.H.A (an orphanage in a rural set up)



Integrated Child Development Services (ICDS) Centre No. 141



Help Age



Ashok Laboratory



Qualissure Laboratory Services

industrial visits



Diamond Beverages



Mio Amore



Hotel Peerless Inn



Taj Sats Air Catering Limited



Columbia Asia Hospital



Fortis Hospital, Anandapur

Department of Textile Science, Clothing & Fashion Studies



Rupa and Co. Ltd.



Rajlakshmi Cotton Spinning Mills Pvt. Ltd.



Ludlow Jute Mills Pvt. Ltd.



Siddheshwari Spinning Mills Pvt. Ltd.





Amarnath Dyeing & Bleaching Works Pvt. Ltd.

industrial visits



Kothari Processors Pvt. Ltd.



Prapti Fashions Pvt. Ltd.



Senorita Creations Pvt. Ltd. (fashion house for brand ONAYA)



P Creations

Department of Interior Designing



The Indian Museum

industrial visits



Jorasako Thakurbari



Swami Vivekananda's Ancestral Home



Philips Lounge



Jaquar Orientation Centre



Sen & Associates



Ecospace Business Park

Department of Human Development



Indian Institute of Cerebral Palsy (IICP)



Narendrapur Blind Boys Academy



We Can-Learning Resource Institute



Calcutta Metropolitan Institute



Seba Old Age Home



Aftercare Old Age Home

industrial visits



Mridul Foundation





Disha Foundation



Parichay Foundation



Calcutta Rescue



Sanlaap

industrial visits



Bubble Blue (play school)



Paripurnata Halfway Home



Various pre-schools (Beginners Montessori House, Leap Years Pre-school, Maple Bear Canadian pre-school, Harvard House, Mongrace Montessori House, Disharee Montessori House of Children, Primary Colours, Little Scholars Play School & Montessori House and Star Kids).





Do not tell them how to do it.

Show them how to do it and do not say a word. If you tell them, they will watch your lips move.

If you show them, they will want to do it themselves.

-Maria Montessori

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Department of Commerce



Pepsico India Holdings Pvt. Ltd.



Rupa & Co.



UCO Bank

Department of Food Science & Nutrition Management

Educational excursion is undertaken to broaden the student's horizon of knowledge through interaction with the industrial experts and this supplements classroom academic. It also helps instill team building spirit among their peers when they stay together away from home.



Apollo Hospital, Bengaluru



Balanoor Plantation, Bengaluru



Central Food Technological Research Institute, Mysore



Coffee Museum, Dasrahalli



Defence Food Research Laboratory, Mysore



Mavalli Tiffin Room (MTR), Bengaluru

Department of Textile Science, Clothing & Fashion Studies

The Institute organizes an educational excursion for all final year students in order to provide them with hands-on experience and practical exposure to different aspects of their curriculum. From visiting small towns and villages to see the regional handlooms and handicrafts to visits at high tech textile mills and state of the art export houses, the excursion gives them a diverse learning experience.



Aquarelle India Pvt. Ltd., Bengalurur



Gyan Silk Mills, Bengaluru



Central Silk Technological Research Institute, Bengaluru



Namaste Exports Ltd., Bengaluru



Maya Organics, Bengaluru



Cauvery Handicrafts Emporium, Bengaluru

Department of Interior Designing

Final year students are taken for an educational excursion every year to various parts of the country in order to expose them to different industries related to their profession. During such trip, students observe and understand the synergy between traditional and modern aspects of interior designing.



Cauvery Handicrafts Emporium, Bengaluru



Lalbagh Glass House, Bengaluru



Lalitha Mahal Palace (Heritage Hotel), Bengaluru



Majeed Fine Arts, Mysore



Mayuri International Furniture Manufacturer, Bengaluru



Tipu Sultan's Summer Palace, Bengaluru



The Energy & Resources Institute (TERI), Bengaluru

Department of Human Development

Educational trips organized benefit students by providing them with a diversified learning <u>experience</u>. It provides them opportunities to explore areas that can be beneficial to them while selecting their profession in future.



All India Institute of Speech & Hearing, Mysore



Maya Organics, Bengaluru



NIMHANS, Bengaluru



Ondede, Bengaluru



Sri Shaila Home for Aged & Care Centre, Mysore



The Spastics Society of Karnataka, Bengaluru



Eco Society for Juvenille Justice, Bengaluru















educational excursion









FRESHERS' PARTY



Freshers' Party 2018 with the theme, Rubix Cube was organized on 27^{th} July 2018 at the College campus for the newly inducted students and was attended by 490 students. A host of cultural programme were organized by the 2^{th} and 3^{th} year students.









INDEPENDENCE DAY CELEBRATION



 72^{nd} Independence Day was celebrated at the college campus on 15^{th} August 2018. The flag hoisting ceremony was followed by singing of patriotic songs, dances & a fashion show on Tri-colour. Students also put-up a skit on freedom struggle.









ANNUAL DAY, 2018



The Annual Day 2018 was held on 12^{th} October 2018 at Vidya Mandir Auditorium and graced by Hon'ble Justice Nadira Patherya, Calcutta High Court as the chief guest.

Meritorious students were awarded and students put-up a cultural medley of dances. A special performance by teachers mesmerized everyone.



Gazals by our Singers



Dance Drama on Evolution of Shakti



Skit on Our Secular India

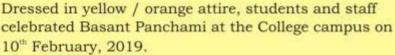




Dance

BASANT PANCHAMI









VISHWAKARMA PUJA

Vishwakarma Puja was organized at the college campus by TCFS Department. All teaching & non-teaching staff members' participated in the Puja.

Vishwakarma Puja is a day of celebration of Vishwakarma, a Hindu God, the divine architect. He is considered as Swayambhu and Creator of the World. This day is celebrated with complete enthusiasm in offices, workshops and factories in the industrial areas.



COMMERCIO CONCLAVE, 2018



5th Annual Inter-college Business Convention, Commercio Conclave, 2018 organzied by the Department of Commerce on 22th September 2018 on the theme Glocalization: The Game-Changer of Modern Business. Prof.Chiranjib Bhattacharjee, Registrar & Dean-Faculty Council of Engg. & Tech, Jadavpur University graced the occasion as the Chief Guest.









EVENTS

- Wrangle Over (Business Debate)
- Quizzenius (Commerce Quiz)
- Arjuna (Best CEO)
- Genesis (Business Plan)
- Notching (Shaping a brand)
- Analyst (Case Study Presentation)
- Prime Time (Bulletin Board)

Fourteen colleges participated in seven events that were evaluated by a panel of eminent jury.

More than 24 companies sponsored this event. The event was powered by The Telegraph and publicized by 91.9 Friends FM (Radio Partner), Taaza TV (Media Partner) and Inox (Multiplex Partner).



JURY

- · Mr. Harish Agarwal, Partner, Ernst & Young
- Mr. Sunil Kajaria, CEO (Keventers Bananas) & COO (Metro Diary), Keventer Agro Ltd.
- Mr. Pradip Gooptu, Chairman, Financial Journalist Group & Founder Trustee - Calcutta Debating Circle
- Mr. Mahesh Shah, Director, Inter Corporate Financiers & Consultants Ltd.
- Mr. Soumitra Pal, Director GB Pharmaceuticals (Boroline)
- · Mr. Rajeev Gupta, AGM, UCO Bank
- Mr. Abhiprasun Chattopadhyay, CEO, Aquatherm Water Treatment Pvt. Ltd.
- Mr. Ayush Chatterjee, Business Head, Global Corporate Sales Torero Corporation Pvt. Ltd.
- Mr. Ranodeep Saha, Founder, Rare Planet Handicrafts Pvt. Ltd.
- · Mr. Rohit Mall, Founder, Pedagoge
- Prof. Aloke Kumar, Professor at Dept. of Journalism & Mass Communication, University of Calcutta
- Mr. Ritwik Mukherjee, Sr. Associate Editor, Financial Chronicle, Deccan Chronicle Holdings Ltd.
- · Ms. Manasi Shah, Sub-editor, Telegraph



St. Xavier's College won the Championship Trophy

ANNUAL PICNIC, 2019



Science and Commerce students along with faculty members undertook their Annual Picnic 2019 on 1^{tr} February 2019 and 2^{tr} February 2019 respectively at Ekanto Apon, Bishnupur, Kolkata.













BOOK-FAIR & SALE



The Learning Resource Centre organized a Book Fair-cum-Sale on 12th and 13th November, 2019 at the Institute premises. A large number of books on a wide variety of subjects were exhibited by 12 leading publishers, distributors and sellers from Kolkata and Delhi. Books were offered at discounted rates.

1971 WAR: India's Finest Hour



A film on glorious victory and war strategy is now taught as a Text Book Case in most military academies in the world including that in Pakistan was screened for the students to acquaint students on this prestigious moment of the country which saw an unprecedented synergy between all organs of the Government and excellent coordination between the Indian Army, the India Air Force and the Indian Navy.

VERVE, 2019



The Overall Winner College

The Departments of Science and Commerce organized the 3rd Annual Inter-college Cultural Fest, Verve 2019 from 14th to 16th March 2018 on the theme, Chronicle-Every Story Matters. Shri. Hirdyesh Mohan (IAS), Principle Secretary, Water Resource Investigation and Development, Government of West Bengal graced the event as the Chief Guest and Mrs. Priti Ray, Partner, Deloitte India as the Guest of Honour.

Thirty-one colleges participated in twenty-eight events under four categories:

Cultural, Creative, Literary and Sports & Games and were evaluated by a panel of eminent jury.

Badging of Core Committee







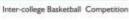
Badging of Former Students







Badging of Current Students





Inter-college Chess Competition

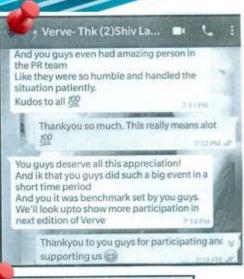


Inter-college Cricket Competition

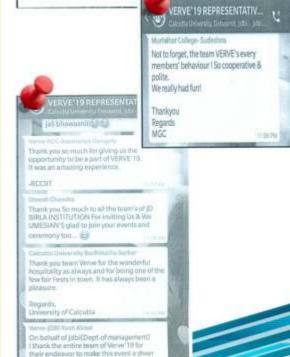
More than 75 companies sponsored this event. The event was powered by the t2 and covered by Friends 91.9 FM. A guest performance by Doorbeen was organized on the final day.

The Bhawanipore Gujarati Education Society College, Kolkata won the trophy for Best College and J.D. Birla Institute (Dept. of Science & Commerce) won the runner-up team award.









wooss. Thank you and kodes to the



Antakshari, Suron Ki Jugolbana



One Act Play, Spotlight



Debate Reported



Group Dance, Donceversity



Hairstyling & Makeup, Makeover Man



Nail Art, The Nail Story



Food Relay, Matter of Taste



ashion Show, Panache



Stand Up Comedy, Jester



July Mastermind



Solo Dance, Step-up



Face Painting, Portroy



Rangoli, Rong-o-utsov



Gas Cooking, Less is More

ALUMNI MEET, 2019



The Alumni Meet 2019 was organized by the Alumni Association of the Institute on 23rd February 2019 at Birla High School Grounds.



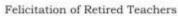






Live band performance by Aaryan







Felicitation of Distinguished Alumni

FAREWELL PARTY







A Farewell Party was organized for the outgoing students on 29th March 2019 at the Army Territorial Officer's Institute.

Crowning Miss-JDBI



Miss FSNM-JDBI



Miss TCFS-JDBI



Miss ID-JDBI



Miss HD-JDBI



Miss COMMERCE-JDBI



Miss M.Sc(TC)-JDBI



Miss M.Sc(HD)-JDBI



Miss M.Com-JDBI

CANTEEN SALES



Canteen Sales named 'The Gourmet's Choice' was organized by 3rd year FSNM students under their paper 'Food Service Management'. The profit of Rs. 11,885/- was used for social cause.



Food Truck



Gullivers Travel



Taste of Italy



Friends



Grub Fest



Gujarat Ni Moj



Rang Barse



Sea Esta



Retro Mix

ANNUAL SPORTS, 2019





Annual Sports, 2019 by the Department of Science & Commerce was held on 4th February 2019 (Prelims) at Rabindra Sarobar Stadium and 9th February 2019 (Finals) at Gitanjali Stadium.

Maj. Gen. Soumendra Dev Mahanti, Vishist Seva Medal (VSM) graced the event as the Chief Guest. The other special guests were Lt. Col Mitali Madhumita, SM, recipient of Gallantry award and the Sena Medal as the first woman officer in the Indian Army and Dr. Aparup Konar, Director of Physical Instruction, Sports Board, Jadavpur University.



The prelim and final for Inter-departmental Indoor Games Competitions (Badminton, Chess, Dart & Carom) were held from 28th to 31th January 2019 and organized by the Sports Club. Students along with faculty, administrative and Group-D staff participated.









Training Programmes





A 7-Day Training Camp was organized by the NSS volunteers to train young girls living in slums in making artificial jewellery ans bags from fabric waste. This activity was done in association with LabourNet India Pvt. Ltd., an NGO at their Rishra Centre from 22nd to 30th January 2019.

NSS volunteers from the Department of Human Development conducted a session for women living in slums and having young children so that they can identify and counteract depression among their children on 28th November, 2018 at Ward No. 58 near Beleghata.





A 30-hour workshop on making Gulaal powder form flowers was organized by the students of the Department of Textile Science, Clothing & Fashion Studies in association with the NSS Cell from 4th - 9th March 2019. Prof. Siddhartha Dutta, Former Pro-VC, Jadavpur University and Professor, Department of Chemical Engineering, Jadavpur University conducted the workshop and participation certificates were awarded by Jadavpur University. About 28 kgs of gulaal were made from bixa (annatto) seeds and marigold and aparajita flowers was prepared and sold at the college

Women from the slums under Ektara, an NGO were trained on the preparation of nutritious and easy- to cook low cost recipes using fruit and vegetables by the NSS volunteers from the Department of Food Science & Nutrition Management on 17th November 2018. They made vegetable peels and stalk pickle, apple-ginger peel jam, bottle gourd peel muruku and vegetable peel khakhra.



Blood Donation Camps



A Blood Donation Camp was organized in association with People's Blood Bank by the NSS Cell on 11th September 2018 where students and faculty members donated 78 units of blood.

Another Blood Donation Camp was organized in association with Indian Red Cross Society, West Bengal State Branch jointly with Central Blood Bank People's Blood Bank on 17th April 2019 where 51 units of blood was donated by students and staff.



Awareness Campaigns





A silent walk on the UN theme, 'Balance for Better' was organized by the students of the Department of Human Development on 8th March 2019 to commemorate International Women's Day. Over 350 students and staff participated in the walk. Ms. Meenakshi Arvind, an avid traveler, a car enthusiast, and a successful entrepreneur flagged off the walk. The event was hosted in association with t2 and Lux Industries sponsored 690 T-shirts. Students put-up a Bulletin Board on the same theme.











Street Plays were organized from 4th- 7th March 2019 to create awareness against the growing menace of tobacco among young girls by students of the Department of Human Development.

A session on Awareness on Womans' Health was organized at the college campus on 29th April 201 for the Commerce students to acquaint them with the needs. The event was held in association with Bhagirathi Neotia Women & Child Care Centre.



Fund Raising & Donations





Students and staff of the college contributed and raised Rs. 200791/- towards donation for victims of Kerala flood disaster. The cheque was handed over to Ramakrishna Mission Seva Pratisthan in aid of the flood victims.

Daan Utsav was observed by NSS volunteers where under privileged children from several NGOs were given gifts of their choice. Prior to this the volunteers collected a wish list from the children. Gifts in the form of clothes, toys, toiletries, stationeries and exercise books were gifted to children from DayaDaan, Development Inspiration Socio-Cultural Helpful Association, The Children of Topsia, Umeed, Calcutta Social Project, CREW, Calcutta Muslim Orphanage and A Little Contribution Welfare Society.



12

NSS volunteers from the Department of Commerce distributed biscuits & cakes to the underprivileged children near the Kalighat temple and Baba Bhoothnath Temple.

Inclusive Activities

NSS volunteers from the Department of Commerce taught underprivileged children at Disha Foundation and Tamas Society every Tuesday and Thursday after college hours.





International Day for the Elderly was observed on 1" October 2018 by the students of the Department of Human Development in association the NSS Cell where students invited and entertained their grandparents and a few senior citizens from Seba Old Age Home. A short cultural programme along with a mime show and quiz was put-up by the NSS volunteers. Guests shared old memories with the students.

A special lunch was organized for Group - D staff members on 7th May, 2019 at the college recreation area. Students cooked for the staff members and also served them.





A 2-day workshop on Innovative Ways to Reduce Plastic Menace was organized by the NSS volunteers in association with the Nature Club of the Institute on 9th and 10th October, 2018. Students crafted diyas, ready-made rangoli pieces & other decorative items from old plastic bottles donated by students & staff members. Small bags were also made from used plastic sheets used as flexes and waste fabric.



An exhibition-cum-sale of the products prepared by Nature Club volunteers during the 2-day Workshop on 'Innovative ways to reduce plastic menace' was held from 15" to 17" November, 2018. The profit was used for social cause.



An exhibition-cum-sale of the prepared food products (jams, pickles and khakhras) by the women from the slums under Ektara, NGO during the training programme were put up on 24th November, 2018. A profit of Rs. 1025/- was generated.



An exhibition-cum-sale of the products prepared (bags from fabric waste, handcrafted jewellery and herbal gulaal) was put-up on 18th to 20th March 2019 at the college campus. A total profit of Rs. 8,854 was generated.



In Kolkata alone, there are over 70,000 people who are homeless and almost one-third of the total population live in slums. Most of the slums are plagued with lack of essential civic amenities and are associated with problems of cleanliness. It was felt that some upgradation in the aesthetics of the slums would uplift the environment and provide some solace to the slum dwellers. Thus, under the Swachh Bharat Abhiyaan (Clean India Mission), NSS Volunteers of the Interior Designing Department took up an initiative to beautify the walls of the slums with painting at Tollygunge (Ward 89) near RSV Hospital. The young artists painted the walls of the slum with beautiful sketches and cartoons on 13th October, 2018 & again on 14" & 15" November 2018. They involved the children of the slums and painted alphabets and numerical tables on the walls to help them learn.





The Volunteers of the Nature Club of the college plantated spinach, chillies and coriander at the kitchen garden. Members also beautified the campus with pots of 100 marigold, 30 chandramallika & 42 peomsitia flowers.



The vertical garden made from recycled plastic bottles was reinforced with concrete and cement and 238 foliage planted. The one outside the campus was fenced.



A bird house was put-up to arrest the menace by sparrows making nests inside the college campus. This initiative would also allow propagation of the endangered species.



MOU with Vital Waste

Waste collection and rubbish disposal play an extremely important role in the global cleanliness and sustainability drive. Waste management and recycling collection can help in the conservation of resources our planet's natural beauty. Keeping this in mind, a Memorandum of Understanding was signed with Vital Waste on 14th June 2019 for providing recycling and allied waste management services. The recycle points earned by through the recyclables sold have been monetarily redeemed and the summary of the first audit report is mentioned below:

The college contributed to Environment Saving through recycling of 1885 Kg of waste paper.

· Trees (Mature Trees): 29

Water: 57000 lts

· Landfill Space: 5 cubic meter

Oil: 1000 ltsEnergy: 8 MWHAir Pollution: 125 lb





Organic foods are better than conventional foods



Government should spend more money to preserve the heritage buildings



Climate Change Affects the Economy



Budget expectations are important for all



Art is art fashion is fashion



Start-ups in India take a long time to flourish



There should be less pressure of education



Inter-departmental debate on the motion, Individual Freedom is a Myth was moderated by Prof. Shabina N. Omar, Head Department of English Milli Al Ameen College (for Girls).



Inter-departmental debate between teams comprising of a student and a faculty, each, from the five departments on the motion, The future will be a gender-balanced world





Stress & Anger Management by representatives from Dharma Ganga Vipasanaa Meditation Centre, Sodepur on 28th January 2019



Inner Values by Mr. Nirav Shah, CEO, Chinmaya Transformation Circle on 26th February 2019



Substance & Drug Abuse by representatives from Indian Red Cross Society on 2^{nd} March 2019



Humanity by representatives from the Brahma Kumaris Rajyoga Meditation Centre on 27° March 2019



Happiness by representatives from the Chinmaya Transformation Circle on 24th April 2019



Basics of Photography by Mr. Sudipto Das, Principal Photojournalist with Times of India & a Senior Member with Photographic Association of Bengal on 21" November 2018



Photography: A Visual Language by Mr. Sudipto Das, Principal photojournalist with Times of India & a Senior Member with Photographic Association of Bengal on 30th January 2019



Creativity through Photography by Mr. Sabyasachi Banerjee, Faculty, Kolkata Film & Television Institute on 22rd February 2019.



Participation in the 2st International Polyphony Photo Festival 2019 organized by the Department of Photography, Ramkrishna Mission Vidyamandira, Belur Math at Vivekananda Sabhagriha Complex on 16th January, 2019



An exhibition on photographs by students on the theme, Nature and Annual Day on 21" November, 2018



An exhibition on photographs by faculty members on the theme, Team Building Excursion on 30th January 2019.



An exhibition on photographs by students on the theme, College Picnic and Annual Sports on 22nd February, 2019



An exhibition of photographs by students on the theme, Women in India was organized on 8th March 2019



The poetry of nature is never dead.



Muskaan Lahoti 1st year, B.Com (Human Development)



Sleepless nights. Unlimited faith.



PRINCEP GHAT-The Heart Beat of Kolkata

Anwesha Pal 2nd year, B.Sc (Human Development)





The selenophile met the Heliophile and the dawn break down



"A dog is the only thing on earth that loves you more than he loves himself."



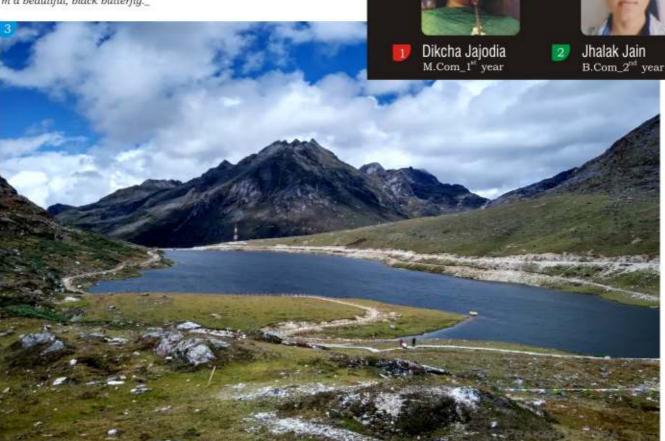
"Minds are like flowers_ they open only when the time is right."



And when I was angry, when I was younger, I was in a cocoon. Now I'm a beautiful, black butterfly._



In my youth, I spent my time investigating insects.



Under the clear blue skies of Arunachal._

When elements of nature meet







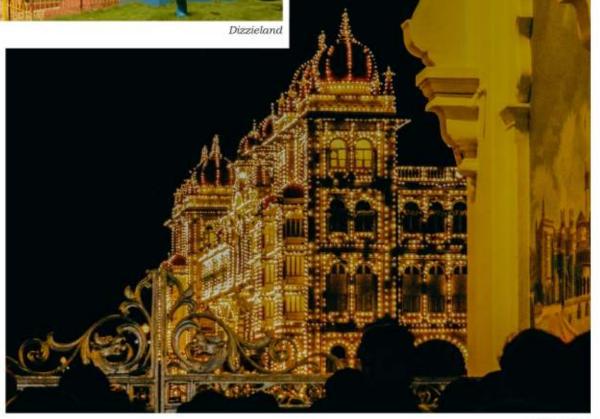
Find your calm amidst the hustle



Carved in Stone



Rishika Losalka 2nd year, B.Com



Golden hour

photography



Arrival of Goddess Durga

Saumi Ghosh 2nd year, B.Sc (Human Development)





Chin up friend, we 'be-leaf' in you



Sky above, earth below and peace within



Take it or leaf it.







A blue sky is waiting just behind the clouds





Victoria Memorial, built as a memorial to Victoria.- David Dimbleby

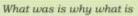


Aishwari Ghosh 3rd year, B.Com



Priya Sharma

1st year, B.Sc
(Human Development)





Where horizon is the limit



Simran Hapani 3^{rt} year, B.Sc (Human Development)

Vidhika Sonthalia

1st year, B.Sc (Interior Designing)





Prachi Baid 2^{od} year, B.Sc (Human Development)



Vishakha Agarwal 1" year, B.Com (Section-A)



Saumi Ghosh 2nd year, B.Sc (Human Development)



Ishita Subhram
1" year, B.Sc (Food Science & Nutrition Management)

sketches



Srishti Modi 1" year, B.Com (Section-B)



Ishita Subhram
1" year, B.Sc (Food Science
& Nutrition Management)



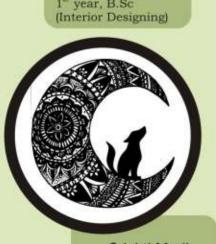
Vidhika Sonthalia



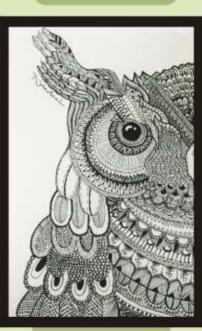
Srishti Modi 1" year, B.Com (Section-B)



Nandani Sikaria 2nd year, B.Com (Section-C)



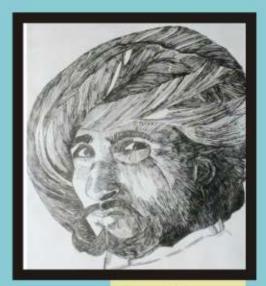
Srishti Modi 1" year, B.Com (Section-B)



Nandani Sikaria 2nd year, B.Com (Section-C)



Taniya Saraswat 1" year, B.Com (Section-B)



Samridhi 1st year, B.Com (Section-E)



Ishita Subhram 1" year, B.Sc (Food Science & Nutrition Management)



Aishwari Ghosh 2rd year, B.Sc (Human Development)



Vidhika Sonthalia 1st year, B.Sc (Interior Designing)

FAREWELLS



A Farewell was organized for Ms. Rita Bibra, former Secretary General, VMS by faculty and administrative staff members on $24^{\mbox{\tiny th}}$ August 2018 at the college auditorium.



With the Administrative Staff













With the Teaching Staff

Farewell was organized for Group-D Staff who retired from College



Mr. Hiralal Prasad Period of Service: 39 years



Mr. Ramesh Singh Period of Service: 42 years



Mr. Surendra Raut Period of Service: 41 years



Mr. Shivram Choudhury Period of Service: 31 years



Mr. Rajaram Das

Department of Food Science & Nutrition Management



(Batch 2016-2019)

Department of Textile Science, Clothing & Fashion Studies



Department of Interior Designing



(Batch 2016-2019)

Department of Human Development



(Batch 2016-2019)

Department of Commerce (Accounting & Finance Specialization, Section-A)



(Batch 2016-2019)

Department of Commerce (Accounting & Finance Specialization, Section-B)



(Batch 2016-2019)

Department of Commerce (Marketing Specialization)



(Batch 2016-2019)

Department of Commerce (Human Resource Management Specialization)



(Batch 2016-2019)

M.Sc (Food & Nutrition)



(Batch 2017-2019)

M.Sc (Textile & Clothing)



(Batch 2017-2019)

M.Sc (Human Development)



(Batch 2017-2019)

M.Com



(Batch 2017-2019)

Post Graduate Diploma in Dietetics & Applied Nutrition



(Batch 2018-2019)

Inauguration of Examination Office

The refurbished Examination Office of the College was inaugurated by Dr. Satyaki Bhattacharyya, Controller of Examination, Jadavpur University on 17th January 2019. Brig. Chaturvedi, Mr. N. Banerjee and Col. S.K. Saha were also present for the ceremony.





Non-Teaching Staff Members



Our Team of Administrative Staff

Group-D Staff



Our Team of Group-D Staff

Our CAMPUS

JDBI has an impressive campus with all support facilities that cater to the academic and physical requirements of its students including:

Spacious, sound-proof and air-conditioned classrooms equipped with LCD and microphones.

WiFi campus

250-seater convention centre, a special 200-seater lecture room and another audio-visual room for college seminars and special lectures

State-of-the-art computer laboratories with LAN connectivity and 24 hour internet access.

A common area for students' recreation and relaxation.

A new state-of-the art cafeteria providing affordable and hygienic vegetarian food.

A playground (Badminton) and indoor games facility (carom, chess).

In-house health center for first aid equipped with necessary medi-care equipments and manned by a full-time trained nurse.

Complete fire-equipment and electronic fire alarm system.

Security controlled gates and CCTV surveillance to ensure the safety of students and staff.

J. D. BIRLA INSTITUTE

Unit of Vidya Mandir Society (Affiliated to Jadavpur University)

DEPARTMENTS OF SCIENCE, COMMERCE

Main Campus & Office: 11 Lower Rawdon Street, Kolkata- 700020 Phone: 24755070, 24767340, Telefax No.: 24543243 • Email: jdbiadmin@jdbikolkata.in