



REFLECTION

N E W S L E T T E R

VOL. V, ISSUE III, OCTOBER 2022

FROM THE DESK OF EDITORIAL TEAM

Welcome to the October edition of RBMI Group of Institutions Newsletter. In this issue, we will recount the various projects, activities and news regarding events at RBMI.

We sincerely appreciate every departments contribution. We value your time as you put forward your interest to what we have accomplished.

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LEARNING by DOING

DEPARTMENT OF COMPUTER APPLICATIONS

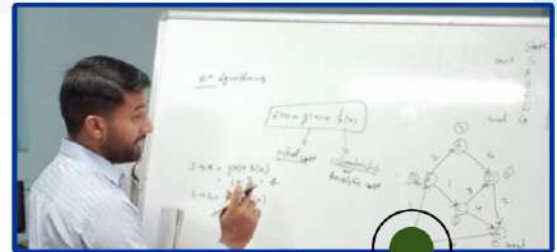
Industrial Interaction

On the subject of "New Developments in Software Industry," Mr. Sachin Sharma, Sr. Engineer Manager, Athenahealth, Noida, participated in an industrial interaction. This session was attended by BCA and MCA students on 31st Oct. 2022.



NOVEL NOTION

Under the Learning by Doing Approach, MCA students introduced a novel notion of artificial intelligence



Q&A session

On 1st October the IT Club of the Computer Application Department arranged a Q&A session on Computer Fundamentals for BCA first-year students.

DEPARTMENT OF ENGINEERING**Activity**

For Diploma students from all streams, the department of engineering organised a lecture on various Welding Operations and the Scope of Solar Energy with our key speakers Mr. Abhishek Kumar & Mr. Samrat Sharma.

**Activity**

Students of B. Tech. streams give presentation on topic of Solar Panel, Computer System Organisation and Cloud Computing. The confidence and leadership skills of the students will grow as a result of these sessions.

Expert Talk

World Students Day is being marked on 15th October in India to celebrate the birth anniversary of Former President Dr. APJ Abdul Kalam. On this occasion our engineering students attended a presentation by an expert Er. Akash Bhardwaj (Scientist ISRO) on Recent Advancement in Engineering and Technology.

**Other events were organized under the banner of Engineering Department**

Under the direction of Dr. Ruchin Jain, B.Tech & Diploma students study the essentials of Microsoft Office

1. To know how to use and be Proficient in important Microsoft Office Programs.
2. To be able to create documents for Printing and Sharing.
3. To be able to create and share Presentations.
4. To be able to manage and store data in a Spreadsheet.

DEPARTMENT OF PHARMACY

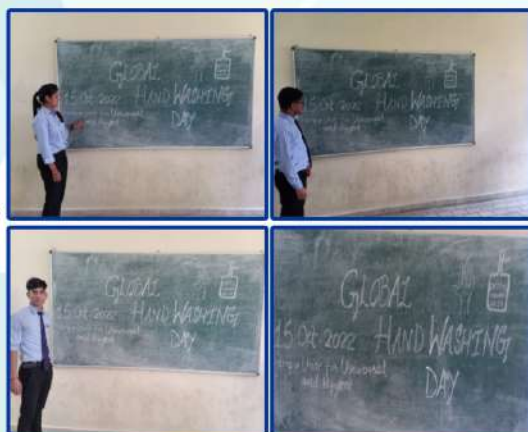
Clinical Pharmacology

Students actively participated in a workshop on clinical pharmacology held by Rakshpal Bahadur College of Pharmacy, where they learned about terms related to clinical pharmacology, various stages of clinical trials, double-blind and single-blind studies, and the stages and overall procedure for drug approval.



Global Hand Washing Day

Global Hand washing Day is an international hand washing promotion campaign to motivate and mobilize people around the world to improve their hand washing habits. Washing hands at critical points during the day and washing with soap are both important. Global Hand washing Day occurs on 15 October of each year. Main objective of this discussion with students is to make them aware of this day and its importance in their life and to enhance their value in the society by their contribution.



HERBAL FORMULATION DEVELOPMENT

The activity on developing herbal formulations was successfully organised by Rakshpal Bahadur College of Pharmacy. Herbal formulations are still the demand of about 75-80% of the world's population, mainly in developing countries, for primary health care because of less side effects and improved patient compliance wherein the department throws light upon the usage of Herbal medicines.



ORIENTATION PROGRAM

Successfully conducted Orientation Program for 1st year students of B.Tech & Diploma students. The aim is to make students familiarize about the campus environment, faculties, infrastructure and help them in getting socially integrated with the college culture.

Attending the Orientation Programme enables the students to make important connections with the collegiate environment, academic studies, peers and network with the campus community.



STEM@RBMI

STEM@RBMI, is motivating and encouraging school children of Bareilly in field of innovation and creativity. STEM KIOSK was positioned at Dushera Mela Oct 2022 with Innovation Gallery depicting around the globe innovations and environmental changes. On December 6, 2022, RBMI Bareilly will organize STEM CARNIVAL-2, a chance for students to show off their hidden abilities. Participants in STEM programmes are encouraged to develop their innovative and entrepreneurial skills. While departing awareness of this program, number of schools like Maharishi Vidya Mandir, DPS, SR International, Mothers public School, Chikkar International School were visited by the STEM team from the RBMI Group of Institutions. Furthermore, Workshops were conducted during the month of October 2022, in the Kendriya Vidyalayas – ASC, JRC, ARMY Public School, GRM, GPM and Sibtis Public School, Bareilly. The science students of class XI and XII took part in workshop in the presence of science faculties. The students showed curiosity in the innovative models demonstrated to them. The STEM team departed knowledge in the field of Robotics using various sensors. The session was productive to Biology Stream students as they were informed about utilizing Biological essentials for eco-innovation. The students offered a large number of ideas in the area of innovation, where science and technology play a significant role in fostering the students' creativity and invention.



ARTICLE

SMART TEXTILES- HEADSTART TO TECHWEAR

Introduction : From the dawn of human civilization, textiles and fabrics in different forms such as sailcloth, tent, ropes, etc. have been used as technical textiles for their technical performance. In our modern world, textile science stands on an unexplored and fantasy-filled horizon. Smart textiles are fabrics that can sense and react to changes in external mechanical, thermal, chemical, electrical, or magnetic factors. The technology of smart textiles integrates textile chemistry, electronics, fiber technology, AI, electronics, molecular engineering, biotechnology, and nanotechnology.

Application : The application of smart textiles extends to medicine, surgery, aircraft and robotics. Like many post-World War I innovations, smart textiles were also developed to meet the demands of the military. The smart shirt is intelligent clothing developed at Georgia Tech by a team led by Prof. Sundaresan Jayaraman and sold by Sensatex for detecting bullet wounds. The optical and conductive fibers are integrated into the clothing which is connected to a photodiode at one end and a laser at another. The diode detects the pulses of light with the help of other circuits. Any interruption to the light pulse indicates the exact location of the bullet entry. It also includes sensors that measure temperature, heartbeat, and respiratory functions.

Technology : SOFTswitch Technology uses Quantum Tunneling Effect in textiles. It uses fully-fabric based sensors and switch arrays. E.R. Post and coworkers engineered row and column keyboard that consists of conductive and non-conductive rows separated by insulating layer of nylon netting. When pressed at right point, current flows from row electrode to column electrode. Such keyboards can be repeatedly rolled up, crushed or washed without affecting its electrical properties.

Future Scope : Considering current trends, worldwide textile industry is over 50 million metric tons per year and if smart textiles can capture only 1%, it still means an industry worth more than 1 billion. It can be anticipated that smart textile industry will have a huge market of its own. This industry will focus on creating customized products such as data wear which can be used in sports and medical imaging. In next twenty years, the smart fiber sector is expected to scale astronomical heights so much that they will become indispensable to humans.

Anu Tomar

BCA 1st Semester

CSA Department

RBMI Group Of Institutions