

# UTKARSH 2016



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**Shail Group of Institutions**

## Vision Statement

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To be a nationally recognized institution of excellence in technical education and  
produce competent professionals  
capable of making valuable contribution to the society

## Mission Statement

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To promote academic growth by offering state-of-the-art  
undergraduate and postgraduate programmes.

To undertake collaborative projects which offer opportunities  
for interaction with academia and industry.

To develop intellectually capable human potential who are creative,  
ethical and gifted leaders.



## Chairman's Message

**"WE CANNOT  
ALWAYS BUILD THE  
FUTURE FOR OUR  
YOUTH, BUT WE CAN  
BUILD OUR YOUTH  
FOR THE FUTURE."**

***(Franklin D. Roosevelt)***

### *These words by*

Franklin D. Roosevelt aptly summarize our aim at Shail Group of Institutions. We endeavor to provide our students a holistic learning experience for life by travelling beyond the boundaries of mere books.

Shail Group of Institutions is an eminent Higher Educational Institution in Madhya Pradesh. They are renowned for the standards of its facilities, students, alumni and a team of core faculty members, who are constantly pushing the frontiers of knowledge that keeps pace with the changing trends in the professional world.

Dear students, "You are the nation-builders, movers of technology and agents of change.

"The knowledge that you gain, qualities that you imbibe and the skill set that you acquire here will set you on the right path to tread in the future.

I appreciate the efforts of the Editorial Board of UTKARSH 2016 for compiling SGI activities over the year and disseminating them to the environment. I believe this magazine will be a good source of guidance for the students and faculty alike.

***"You don't  
have to be  
great to start,  
but you have  
to start to be  
great."***

**Rohit Jainendra Jain**  
Chairman  
Shail Group of Institutions

# Director's Message



ability of our team of highly qualified, experienced and dedicated faculty.

Centre for Entrepreneurship Development at IIST, is a boon towards the Startup India campaign which is based on an action plan aimed at promoting Bank financing for the new ventures to boost entrepreneurship and encourage with the jobs creation. Software Application Centre is preparing students for a big leap forward meeting up with India's new area of progress in Digitizing India.

In our constant endeavor in up-scaling the standards of IIST, we are now marching ahead towards an Autonomous Institute, aiming to attain University status in collaboration with a reputed Overseas University.

These dynamic steps are being taken in synergizing with the National Goal of a Modern India in meeting up the visions of 'Swachh Bharat', 'Digitizing India', 'Make in India' and 'Smart Cities', which are National priority Missions. We are all duty bound to gear up ourselves to meet the challenges arising out of the vision of taking India to the next level of a developed Nation; and be at the competitive platform with global professionals. The young Nation is ready to graduate from Developing to Developed status, and we shall leave no stone unturned to deliver desired results at this opportune moment. Let us join hands in this crusade!

## Dr. Joy Banerjee

M.Tech, Ph.D. (IIT KGP)

Director, School of Engineering

Shail Group of Institutions (IIST), Indore, M.P.

Phone - 0731-4010520

Challenge of the teaching community today is to enhance employability of the students. This is possible by making classrooms interesting so that students' attention is arrested. Hence the Faculty has to take responsibility as Winston S. Churchill said, "The price of greatness is responsibility". The responsibility to groom, responsibility to mentor and the responsibility to hold the students in difficult times to show them the way, is the essence and need of the hour, in scaling up to match with the National and Global community of professionals.

IIST takes a giant step to fulfill academic aspirations of education Community by establishing, 'National E-Teaching-E-Learning Centre' soon. Our aim is that our students be the flag bearers of the new India in the time to come with desired competencies, keeping in tune with the changing times. IIST is the only Institute located in the Central part of India can proudly announce the fruitful tie-up with so many premier IITs and operating Center of Excellence/ Nodal Centers of BSNL, NASCCOM, EC Council, Visual Paradigm, EMC etc.

Right now India being a young Nation; passes through a critical path of progress and tapping the potential of our youth in the right manner is the need of the hour. The calm and serene atmosphere of the location of our Institute is a strong motivating factor for young boys and girls to join the Institute besides the availability of best academic Infrastructure and account-

# Principal's Message

# IIP



It gives me immense pleasure to pen a few words as prologue to our upcoming magazine 'UTKARSH' exclusively meant for churning out the latent writing talent which bears immense potentiality of sharpening communication skill as part of overall personality development. One of the primary functions of an education institute is to give opportunity to students to express in a healthy way.

A magazine enables students to express their ideas and promote their creativeness. I am sure that this edition of 'UTKARSH' will provide a broad view of the spectrum of activities that will go to mould the all-round personality of our young generation.

Our ultimate aim is the empowerment of students for their progress with sound knowledge, wisdom, and experience along with extra co-curricular activities. We all have to ensure that there is no stone left unturned to equip the student of today for the challenges of life. This will require tremendous self-motivation on the part of all concerned but will be fulfilling for the student as well as the faculty. I wish to congratulate the entire faculty and office staff of IIP/ IIST for encouraging and guiding the students in all facets, for their well rounded development.

***“I congratulate the editorial board for bringing out such a wonderful magazine” achieving greater success and scaling newer heights in your education and career ahead. I wish you all the best for achieving greater success and scaling newer heights in your education and career ahead.***

**Dr. Sanjay Jain**  
Principal IIP



## Principal's Message

# IIMR

***I hope the IIMR students will go on realizing their dreams to create benefits for employer and society at large.***

Management education offers systems for developing industry ready, business oriented and conceptually sound professionals for managing and excelling in corporate world. The student who comes to study management hails from diversified educational background and has to work in corporate diversity. The change is the only permanent and important phenomenon in the business world and one needs to have attitude to learn continuously and be flexible in implementation.

IIMR has built the process and practices for developing all the requisites of successful managers like communication and soft skills, corporate internship, case based study, creative and innovative research, teaching based on modern pedagogy and an excellence driven culture. We believe in developing holistic human potential by offering exposure to modern work practices in global economy and developing requisite leadership and managerial skill.

**Dr. Mayak Saxena**  
Principal IIMR



## *From the* **Editorial Team**

It is often said “Give me a copy of your college magazine and I will tell you about the quality of your college”. Editorial Board strongly believes in the statement and understands the vital role of the magazine in promoting institutions. It brings out into open things hitherto unrevealed and names of unsung heroes and their mighty deeds. With these in mind, the Editors have immense pleasure in presenting much awaited Annual Magazine, UTKARSH 2016.

SGI has grown abundantly in the recent past and continues to sustain its growth. Readers will realize the tremendous changes that are happening in the SGI campus and momentous efforts made by management to make SGI a centre of excellence in education and research.

The magazine has been crafted to give that compendious view of plethora of events, happenings and events of SGI besides highlighting the literary and artistic talent of Shail family. The content also amply demonstrates the communication skill, poetic prowess, imagination and creativity, humor and humanism, technical competence, and patriotism of the contributors.

***Wishing you  
all a joyous  
reading.***



## *Dear Alumni &* **Friends**

### **As President of the IIST Alumni Association,**

I am truly humbled and honored to represent such a prestigious engineering institute which really needs no introduction. IIST has been at the forefront of quality technical education in India since its inception. By combining the research and development activities with teaching the institute has emerged as a pioneer in the technical field.

There is a saying about IIST: “When it happens in IIST, it becomes a tradition.” There are many traditions I can recall, and the last but not least tradition created by IIST class of 2007 is “IIST Alumni Association”.

As President of Alumni association, I had opportunity to talk to the students who I found to be lively, energetic and dynamic. I am committed to strengthening IIST’s alliances with alumni and connecting with more alumni than ever before. The alumni board is interested in having a presence at more activities in the coming

year, so if you know of an event, or if you would like to get involved in one of the existing events, don't hesitate to contact me or the Alumni Office.

In closing, I would like to thank each and every one of you for your dedication towards IIST. It is my goal to help you stay connected with IIST students, faculties and alumni. The future of IIST lies in each and every one of you. You are now the voices of experience and commitment to an outstanding institution. Let your voices be heard. I look forward to seeing you and thank you for the honor of being your president

**Vivek Joshi**

Alumni Association President  
alumni@indoreinstitute.com



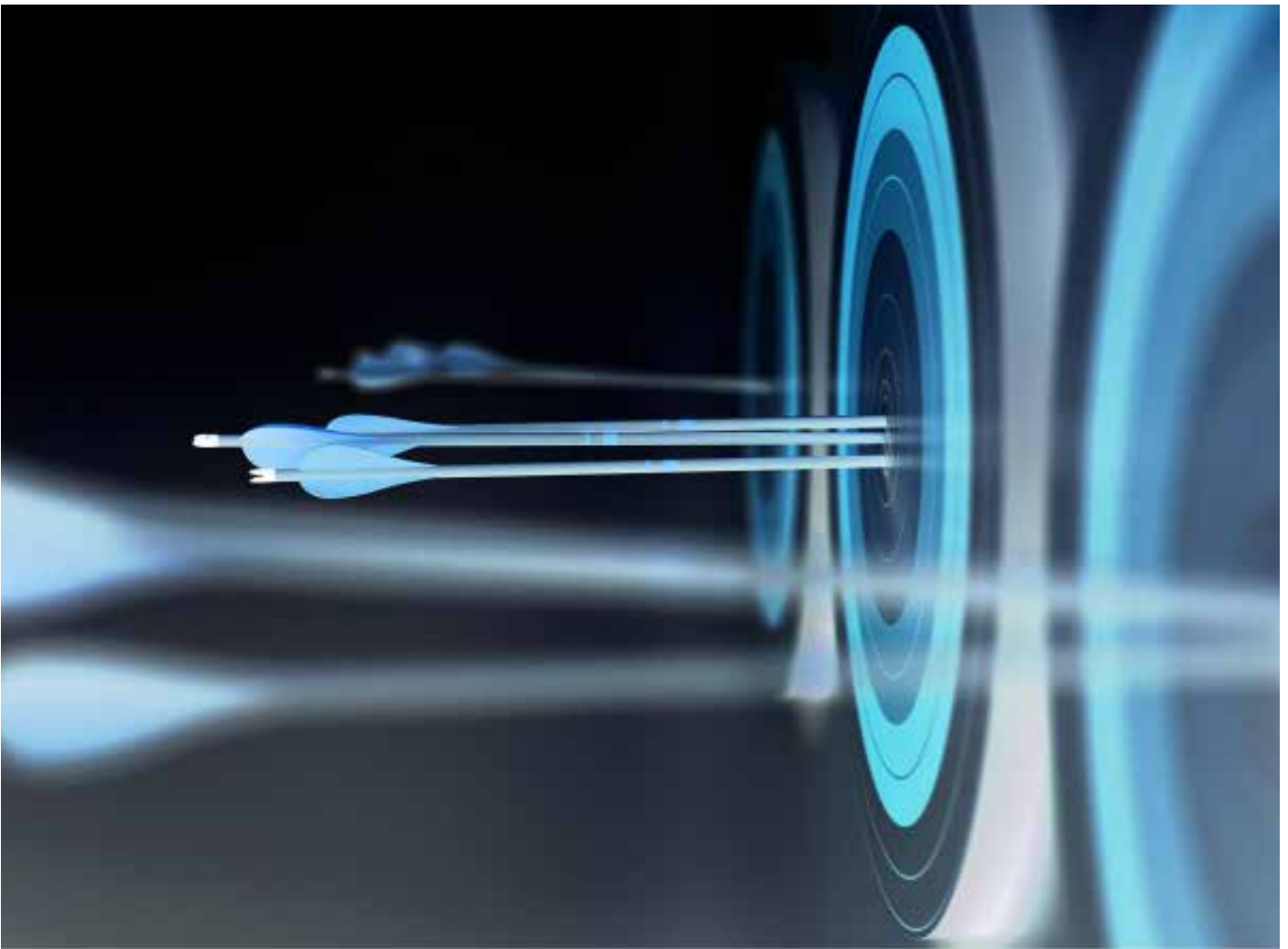
# *Message of Alumni* **Coordinator**



Status of alumni of an institution is one of the indicator of growth of an institute. We feel proud to say that our alumni have done well in various fields and become successful entrepreneur, diligent leaders, top executives in corporate and also serving in Defence and other Security Services. We are in continuous touch with the Alumni who are IISTian forever.

In today's competitive environment, a student needs to have good command on communication and other soft skills beside academics. Our alumni are continuously encouraging and updating our students with industry specific inputs with an effort to make them employable at the very first campus.

**Prof T S Arora**  
Alumni Coordinator



# Marching Towards Excellence

*Indore Institute of Science and Technology has taken number of initiatives to bring in academic excellence by collaborating with various IITs and many reputed multinationals. The details are as under:*

## **a. Virtual lab of IIT Delhi**

IIT Delhi has designated Indore Institute of Science and Technology as the nodal center for their Virtual Labs. These labs will cover all basic branches of engineering and science.

Faculty from IIT Delhi had visited IIST to brief and train faculty and students on the Virtual Labs. Dr. Joy Banerjee, Nodal Coordinator, along with two faculty members of IIST had gone to IIT Delhi for training on operation of Virtual Labs. Subsequently our nodal center will organize workshops for students and faculty members of nearby institutions. Virtual Labs will enable the students to perform experiments remotely as an on – demand service over the web.

## **b. iPDC of IIT Kanpur**

iPDC (i3indya Propeller Display Challenge) is a national level competition on Propeller Display Technology hosted by Techkriti 2015, IIT Kanpur with i3indya Technologies for the first time in India. Preliminary competition was conducted across 8 cities of India. IIST was the nodal center for Indore. Students of IIST were shortlisted and presented their project at IIT Kanpur during final event.

## **c. e-Yantra of IIT Mumbai**

e-Yantra is a project, sponsored by Ministry of Human Resource Development (MHRD) in association with National Mission on Education through ICT (NMEICT). The project is spearheaded by IIT Bombay to spread knowledge Embedded systems and Robotics. e-Yantra Lab set-up Initiative (eLSI) supports the infrastructure creation at colleges by providing a platform for training teachers both in theory and applications of Robotics. IIST is the nodal center of the project in Indore. Students are being given hand-on training on embedded system and robotics.

## **d. QEEE of IIT Chennai**

Quality Enhancement in Engineering Education (QEEE) programme of IIT Madras is an initiative of Ministry of Human Resources Development with the objective to bring out favorable changes in improving the quality of technical education. IIST is the only college from entire Madhya Pradesh who has participated in the programme with over 1000 students and faculty attending it on regular basis. Best of IIT Madras faculty had given training during the on going session. Many of our students have won prizes in the various competitions organised by the forum and received certificate for successful participation in the programme. IIT Madras has acknowledged IIST as the proactive member of the programme.

## **e. Spoken Tutorial of IIT Bombay**

IIST is partner of IIT Bombay's free software Training in distance learning mode. The spoken Tutorial is a magical AudioVideo teaching tool promoting ICT enabled learning. Though computer based, the learning and practice is completely offline once the courses are downloaded. Students can listen, pause, rewind, fast forward as per their progress and in an interactive manner. All Students are awarded certificates after training. Many software like Linux & Ubuntu, Scilab, Python, PHPMySQL, C, C ++, Java and Netbeans, Java Business Application, LaTeX and many more can be learnt using this tool.

## **f. Collaboration with NASSCOM**

IIST has signed a MoU with NASSCOM (SSC NASSCOM) to launch the Global Business for Foundation Skills (GBFS) and Foundation Skills in IT (FSIT) program. The strategic alliance aims to offer GBFS & FSIT program to all undergraduate students as an add-on course to enhance the employ ability skills of these students. The MOU with

SSC-NASSCOM includes . Global Business Foundation Skills (GBFS) 2.0 with the objective to facilitate the development of basic skills in students, to help enhance their employability at the entry level in the BPM companies and Foundation Skills in Information Technology (FSIT) to facilitate the acquisition of skills required in the IT industry today.

## **g. Visual Paradigm**

IIST is a partner in the Visual Paradigm Academic Program of the US based company. This is a design & management tool for business IT system development. Visual Paradigm is used to conduct teaching and learning of different UML, BPMN and SysML Models. Special focus is given to analysis and design phases of the student project.



# SHAIL GROUP OF INSTITUTIONS

**Shail Group of Institutions**, in the short span of 13 years, has created a niche for themselves in

Madhya Pradesh and stand tall as premiere institutions of professional learning in the field of engineering, computer application, management and pharmacy. Best of infrastructure spread over 55 acres of lush green campus, dedicated faculty and motivated students have made SGI a class by itself. Our students have made their mark in national competitions.

As SGI venture into future, there is enthusiasm all around. Learning is a continuous process, requires an invigorating environment and right set of opportunities. Management believes in it and continuously providing the same to students and faculty.

Indore Institute of Science & Technology, established in the year 2003, is the flagship institution of the group. It is undoubtedly one of the top engineering colleges of Madhya Pradesh and one of the best in Indore. IIST is collaborating with various IITs like IIT Delhi, IIT Bombay, IIT Madras and IIT Kanpur for academic excellence besides tying up with leading corporate for industry specific skill development.

These collaborations bridge the skill deficit and ensure that the students are employable immediately on graduation. The college has introduced e-Learning and teaching to give the students access to ever growing educational resources and services. This ensures education in continuous and collaborative mode.

Indore Institute of Management & Research has been offering PG courses in management. Industry centric training programme by leading lights of the corporate is built in the curriculum for the students to get a feel of real life corporate environment. This is supplemented by intensive summer internship programme to make the students industry ready. IIMR is now broad basing its curricular by introducing specialized BBA and BA courses. Such premium courses will serve as backward integration for its MBA programme.

Indore Institute of Pharmacy is a leading light in pharmacy education and boasts of superior infrastructure. Laboratories are equipped with sophisticated equipment and instruments which give the student hands on training and make them immediately suitable for employment in corporate. Pharmacy Council of India has accredited the courses, thus giving a stamp of approval of the quality of education being imparted by IIP.



All the institutions enjoy superior facilities as mentioned below and provide the desired environment for holistic development of students:

- Renowned faculty with considerable experience in teaching and industry
- Accreditation for campus placement by leading corporate
- NBA accreditation of engineering disciplines
- PCI approval of pharmacy courses
- Industry specific curriculum
- E-Learning & teaching
- Rich library with large number of books and journals of national and international repute
- Medicinal garden and animal house
- All possible indoor and outdoor sports facility
- In campus hostel for boys and girls
- Language laboratory for enhanced communication training
- Personality Development Programme for soft skill traing

# Parent's *Interview*



*Interview of*  
**Mr. Ravindra Singh Raghuvanshi,**  
*Father of Rishabh Raghuvanshi*  
*CSE IV Year*

Q1.Sir,What did you expect from your ward?

As parents we have always wished for best future of our child and we also wanted all of his dreams to come true. By his hard work and determination he made his dream come true by getting selected in TCS and also in Indian Navy.

Q2.Sir, What were your expectation from IIST?

We still remember the time when we had to choose an engineering college for our son and we were visiting various colleges of Indore. But when we visited IIST, we found that the college belongs to well known SHAIL GROUP OF INSTITUTIONS, which is a centre of excellence in practice and in principle. We found good infrastructure, laboratories and facilities at IIST but above all there was good faculty team and a nice environment for studies.

Q3.Did IIST meet your expectations.

Rishabh scored good marks in all the semester due to supportive faculties and staff. He was counseled, coached and mentored on a regular basis. Beside academics, college provided training on personality development, aptitude and communication skills, This has helped him in grooming his overall personality and thus he got selected in TCS (Tata Consultancy Services) and also in INDIAN NAVY.

We thank the institute, faculties and all the staff members of IIST for providing the best possible guidance to our son and helping him in achieving his goals.



*Interview of*  
**Mr. Sandeep Gupta,**  
*father of Shreyanshi Gupta*

Q1. Did your daughter meet your expectation?

We always had a wish that our daughter would come off with flying colors. I am happy to say that she has fulfilled our expectations. She got first position in the institute for the past 4 semesters with a SGPA of 9.19 and an excellence award for "English for Employability" from IIT Madras through QEEE.

Q2.How IIST helped your daughter in holistic development?

IIST has really helped in holistic development of Shreyanshi. IIST had focused on overall development from the very first year itself. From bottom of our heart we thank the IIST team members for grooming our child and making her shine like a star. As we all know "The Leaders of Tomorrow are the Doers of Today" our daughter is one of them.

# MBA Placements

IIMR received a very good response from the corporate world for placement of students of the batch of 2013-2015. More than 40 companies have participated in our placement process and offered jobs to 73% students. Around 15 companies participated for the first time.

Our MBA graduates got a variety of roles from a wide spectrum of sectors, across multiple functional domain which include Consulting, FMCG, IT/ITES, E-Commerce, Telecom, Media, Manufacturing, Digital Marketing, Airways, Pharma & Healthcare, Textile, BPO and Logistics, etc. The average package for the batch is Rs. 2.4 lakhs. The highest offer was made at Rs. 5.5 lakhs.

Some of the prominent recruiters who have participated in our campus placement are:

Air India, Jet Airways, Singapore Airways, BCM Group, TCS, Yokohama Ltd, Axis Bank, Reliance, Cipla, Web Dunia, SEAC Ltd, India Mart, Mphasis, NEPA Mills Ltd, Tikona Digital Network, Sundaram Wealth, Capital Via, Ocean Research, Epic Research, Capital Heights, Trifid Research, E-Cap, Sofmen Technologies, Genuine Soft Technologies, to name the few.

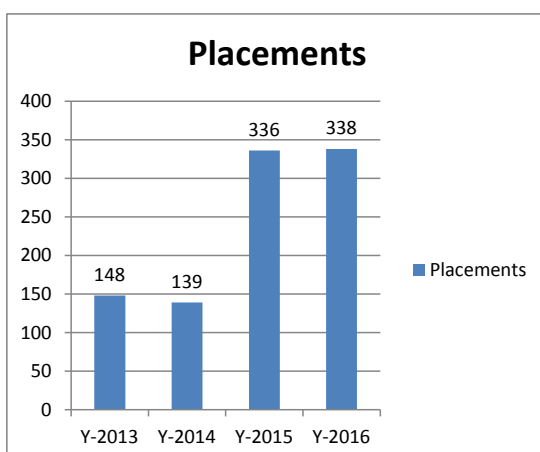
## Placement Report

Training & Placement Cell has an onerous task of fulfilling the aspiration of students in meeting their career objectives, be it placed in good corporate sector or pursuing higher studies in India or abroad, be an entrepreneur. It is a daunting task as fresher's are not immediately employable due to deficit in skill set required by the employers.

### Objectives

- Assist students develop /clarify their academic and career interests, and their short and long term goals through individual counseling and group sessions.
- To work with faculty members and department Deans to integrate career planning with academic curriculum as well as coordinate summer training/internship programs.
- Assist employers to achieve their hiring goals.
- Provide resource and activities to facilitate the career planning process.
- Act as a link between students, alumni and the employment community.
- Up gradation of both technical as well as soft skill of the students commensurate with the expectations of the industry.
- Assisting our students to place them in reputed companies or guide them to select an institution of higher learning for further studies and research.

***T&P Cell, with the assistance of faculty coordinators and student coordinators have been making untiring efforts to ensure maximum eligible candidates are placed. Result of their efforts are seen on the ground. Already 400 students have got placement and the number is still counting.***



**Aishwary Mendke**  
Training and Placement Officer

# Placements




# SPORTS

The belief of SGI to ensure holistic development can be seen from the achievements of our students in the arena of sports as tabulated below:

## Indore Institute of Science & Technology List of the players who have played at State/University Level 2014-15

S. No	Game	Name	Branch	Team Position	Description	Tournament Date
1	Athletics (W)	Pooja Wagdre Ayushi Dongre	CS-4th year ME-3rd year	Silver Medal Gold Medal	Won 2 Silver & 1 Bronze Medal in Indore Nodal level Inter Collegiate Athletics Meet in 100 & 200 mts. And Long Jump Event 2014-15. Ayushi Dongre Won 01 Gold & 1 Silver medal in State level Athletics Championship for Shot put & Discuss Throw Event held at Laxmipati Institute of Science & Technology, Bhopal and also selected for RGPV, All India Inter University held at Chinnai.	22/11/2014 To 24/11/2014
2	Badminton (M & W)	Srajan Jain Ada Khan	IT-4th year CS-2nd year	Winner	Winner in State Level Inter Nodal Badminton Tournament held at	07/10/2014 To 11/10/2014
3	Basketball (M)	Momin Khan	EC- 3rd year	Runner	Runner in State Level Inter Nodal Basketball Tournament	10/09/2014 To 12/09/2014
4	Basketball (M)	Saloni Rathore	EC- 3rd year	Runner	Runner in State Level Inter Nodal Basketball Tournament Represented RGPV	10/09/2014 To 12/09/2014
5	Kho- Kho (W)	Ayushi Dongre	ME -3rd year	Winner	Winner in State Level Inter Nodal Kho Kho Tournament	30/10/2014 To 2/11/2014
6	Volleyball (M)	Moh. Faiz Khan	ME -3rd year	Winner	Winning Team in State Level Volleyball Tournament	30/09/2014 To 02/10/2014
7	Volleyball (W)	Vaishali Phate Vaishali Thakur	EC-3rd year EC-3rd year	Winner	Indore Nodal Volleyball Team was Winneing Team in State Level Tournament  Vaishali Phate was Selected RGPV University	30/09/14 To 02/10/2014
8	Chess (M)	Ekansh Pandit	IT -2nd year	1st Rank	Obtained 1st Rank in State Level Chess Tournament	11/09/14 To 12/09/2014
9	Baseball (M)	RupeshChoudhary Shubham Dubey Ashish Nagar Mayank Shrivias Vinesh Goad Ajay Shrivastav	ME-4th year EC-4th year EC-4th year Civil-1st year ME-1st year ME-3rd year	Runner	Runner in State level Baseball Tournament  Shubham Dubey, Mayank Shrivias & Ajay Shrivastav has Represented RGPV	20/10/2014 To 21/10/2014
10	Handball (M)	Prateek Khatri Vicky Kushwah	CS-2nd year CS-2nd year	Winner	Winner in State Level Inter Nodal Handball Tournament	9/10/2014 To 12/10/2014

S. No	Game	Name	Branch	Indore Nodal Team Position	Description	Tournament Date (State Level)
11	Power Lifting (M)	Rajat Sharma Sourabh Gayakwad Gourav Chawray Vaibhav Yadav Sambhavadiya Sharma Subham Tripathi	ME-4th year ME-4th year ME-4th year EC-3rd year EC-3rd year EC-3rd year	GOLD Medal	Rajat Sharma Won GOLD in State Level 83 kg Weight Lifting Tournament. Team was Winner in State level Power Lifting Championship Rajat Sharma was Selected in RGPV, Inter university Team.	28/11/2014 To 30/11/2014
12	Softball (M)	RupeshChoudhary Shubham Dubey Ashish Nagar Vinesh Goad	ME-4th year EC-4th year EC-4th year ME-1st year	Runner	Indore Nodal Baseball Team was Runner in State level Tournament held at LNCT College, Bhopal. Rupesh Choudhry & Subham Dubey Participated in RGPV team	16/11/2014 To 17/11/2014
13	Cross Contry	Satish Kumar Singh	ME-1st year	6th Position	Satish Kumar Singh Obtained 6th Position in State Level Cross Country Championship	13/9/2014 To 14/9/2014
14	Football (M)	Momin Khan	EC-3rd year	Winner	Winner In indore nodal tournament	30/10/2014 To 2/11/2014
15	Taekwondo (M)	Himanshu Pipraiya Lucky Yadav	ME-1st year Civil-1st year	GOLD Medal	Himanshu Pipraiya & Lucky Yadav Won, GOLD Medal In (58 Kg. & 74 Kg. Weight category) Indore Nodal State level Taekwondo Championship and also selected for RGPV Inter University	5/12/2014 To 6/12/2014
16	Gymnastic	Prahlad Singh	B.Pharma 3rd Year	Winner	Winner In Indore Nodal Tournament	14/09/2014



**Chemical Engineering**



**Civil Engineering**



**Computer Science**



**Electronics & Communication**



**ESH**



**IIMR Faculty**



**Mechanical Engineering**



**Pharmacy Faculty**



**Student Development Cell**



**Students Section**



**IT Department**



**Admin Department**



**Accounts**



**Library**



**Networking**



**Purchase**



**Exam Section**



**Site Office**



**Transport**



**Care Taker**





**Computer Science Engineering Students**



**Chemical Engineering Students**



**Civil Engineering Students**



**EC Students**



**IT Students**



**Mechanical Students**



**B Pharm Students**



**D Pharm Students**



**MBA Students**

# ROBOT



Genesis of the term robot dates back to 1920 play, Rossum's Universal Robots, by Czech sci-fi writer Karel Capek. Etymologically the term derives from the Czech words, robota meaning obligatory work and robotnik meaning a person who serves to a lord. Capek's had conceptualized robot as a new class of artificial people that would serve humans. Thus robots, today, in essence stand for two major trends, advancement of technology and an updated version of labor who will serve the human kind.

Key developments like Belief Space, Cloud Robotics and Material Science are making possible rapid advances in robotics. Belief Space refers to modeling of a given environment statistically and is an algorithm which makes sense out of complex contexts. Before cloud robotics came up, robots had limited data of own experience or that of a narrow cluster. They are stand alone pieces limited to hardware and software inside the unit. But being constantly connected to cloud, robots can now incorporate experience of every other of their kind. Advancement of

# ROBOT

material science has made it possible for robot no more to be cased in aluminum bodies of armor like C-3PO or R2-D2. Today robots bodies are made of silicone, spider silk, air muscles, electroactive polymers and ferrofluids. Such robots are amazingly natural looking and some are biodegradable too. Nanorobots, still in their infancy, promises to be of 10<sup>-9</sup> meters which will diagnose and treat disease at cellular level. On the other side of the spectrum, largest walking robot is a German made fire breathing dragon that stands 51 feet tall and weighs 11 tons.

Future caretakers of ageing population are being developed in Japan. Toyota has built a nursing aide named Robina, a female robot, 60 kg in weight and 1.2 m in height that can communicate using words and gestures. Robino's brother, Humanoid, serves as a multipurpose home assistant. Honda has created ASIMO, which is sophisticated enough to interpret human emotions, movements and conversation. As the technology continues to improve, a debate is on whether robots will finally surpass human being. Robotic community has coined a concept called Singularity, a point in time when artificial intelligence will match human intelligence. Mathematician Vernor Vinge predicts that it will occur by 2023 whereas futurist Ray Kurzweil says 2045. But a section of people argues that software for singularity will only be possible when scientist will be able to understand the complex neural structure of human brain.

Robots are playing a big role in the operating room. Intuitive Surgical of USA has manufactured minimally invasive remote robotic system, costing \$ 1.8 million, to assist in complex surgeries which have been used over 200,000 surgeries a year. Enable Talk is a robot solution which is allowing a deaf and mute person to speak. Christian, a

12 year boy had acute lymphoblastic leukemia and could not attend school. A Vgo robot, placed in the class room, enables Christian to sit in his living room and participate in class discussion in real time. NAO, built by a French company, serves as a teaching assistant in science and computer science classes in 70 countries.

Industrial robots are conquering the world. Industries linking the real-life factory with virtual reality will play an important role in global manufacturing. Simplification of robots will open up huge potentials in all industries including small and medium-sized companies. Robots improve the quality of work by taking over dangerous, tedious and dirty jobs that are not possible or safe for humans to perform. Next generation robots will be mass produced at declining cost that will compete with low wage workers. Foxconn, the Taiwanese company, who manufactures product for Apple, Samsung, Microsoft employs 300,000 robots, one for every 4 workers.

Robotic competitions are becoming very popular. International Autonomous Robot Racing Challenge 2016 will be held during July 16-18, at University of Waterloo with participations from students of all over the world including India. DAPRA Robotic Challenge concluded on Feb 24, 2016. First place and \$2 million in prize money was won by DRC-Hubo robot built by Team Kaist of Daejeon, Republic of Korea.

Robots will produce clear benefits to society. There will be fewer work related injuries, fewer traffic accidents, less invasive surgical procedures, and many new capabilities, from sick homebound children being able to attend school to giving power of speech to those who are deaf and mute. It is a net good for the world.

भारतीय विशिष्ट पहचान प्राधिकरण  
भारत सरकार  
Unique Identification Authority of India  
Government of India

आधार नंबर / Your Aadhaar No. :  
**4444 5555 6666**

आधार - आप आदमी का अधिकार

आधार पत्र के इस हिस्से को काट कर सदा अपने पास रखें और इसके माध्यम से सेवाओं का लाभ उठाएँ।  
(आप इसे तमिनेट भी करा सकते हैं।)

# AADHAAR

**Aadhaar:** A Revolutionary Approach to Direct Benefit Transfer towards Financial inclusion & Development of People.

Aadhaar is a 12-digit unique identification number issued by the Indian government to every individual resident of India. It has revolutionized the Direct Benefit Transfer to the common man in India. It not only ensured good subsidy management process but also ensured a Digital Identity for each Indian beside financial inclusion and social upliftment to people in the far-reaching areas. The bio-metric based identity scheme is expected to make the delivery of Rs.3.5 Cores worth central welfare scheme to which 99 crore people (out of India's 1.2 billion population) have already been enrolled, with 97% of the adults and 67% of the children. Aadhaar is the brainchild of Shri Nandan M Nilekani, who had been the Chairman of UIDAI. The

Program has induced a higher degree of transparency by releasing the benefits through Bank Transactions on the basis of the Unique Identification Number of the Aadhaar Card of each individual. This has resulted in a saving of Rs.15000 Crore LPG subsidy.

The Aadhaar project was initiated as an attempt towards having a single, unique identification document or number that would capture all the details, including demographic and biometric information, of every resident Indian individual. Currently there are a plethora of identity documents in India including passports, permanent account numbers (PANs), driving licenses and ration cards. The Aadhaar card / UID will not replace these identification documents but can be used as the sole identification proof when applying for other things. It will also serve as the basis for Know Your Customer (KYC) norms used by banks,

financial institutions, telecom firms and other businesses that maintain customer profiles. Aadhaar numbers will eventually serve as the basis for a database with which disadvantaged Indian residents can access services that have been denied to them due to lack of identification documents.

The following are the benefits of Aadhaar Card:

1. Aadhaar based Direct Benefit Transfer (LPG Subsidy): The 12 digit individual identification number on Aadhaar card is used to get LPG subsidy amount directly in the bank account. This DBTL scheme is named as PAHAL. To get this benefit you need to visit your area's distributor and get Aadhaar number linked to the 17 digit LPG consumer number. Although now you can get direct benefit transfer by linking bank account to the LPG number.
2. Jan Dhan Yojana: The Guinness world record holder scheme, Pradhan Mantri Jan Dhan Yojana (PMJDY), accepts Aadhaar card/number as the only document sufficient to open the bank account. The benefits offered are, free zero balance savings account, life and accident insurance and many others.
3. Passport in 10 days: If you have an Aadhaar card, you can get passport in just 10 days. Under this format, police verification will be done at a later date as opposed to the previous rule requiring police verification which used to be time consuming. Also under the new government's rule, if you need a passport, Aadhaar number is compulsory.
4. Digital Locker: Government of India has launched digital locker system for everyone for storing all personal documents on the government's server. And sign-up process for DigiLocker requires person to link his/her 12 digit Aadhaar card.
5. Voter Card Linking: Starting 9th March 2015, Linking of Aadhaar card number with voter ID will eliminate bogus

voters. Once an Aadhaar number is linked, it would become impossible for an multiple voter ID card holder to make it's illegal use.

6. Monthly Pension: All the pensioners from select states will now have to register their Aadhaar card number to their respective department in order to receive monthly pension. This move was initiated as there have been fraudulent incidents as beneficiaries requesting pension were found to be fake.
7. Provident Fund: Similar to pension, provident fund money will be given to the account holder who've registered their Aadhaar number with employee provident fund organization (EPFO).
8. Opening new bank account: Aadhaar letter is now acceptable by banks as a valid proof to open bank account. In fact, it can serve as an address proof as well provided address on Aadhaar card and address proof perfectly matches.
9. Digital Life Certificate: Aadhaar linked digital life certificate is another initiative which was launched by Department of Electronics and IT. Named as "Jeevan Praman for Pensioners", this system will end the process where pensioner had to be physically present at Pension Disbursing Agency to avail pension. Instead all the details of pensioner will be accessed digitally by the agency.
10. SEBI: It is now accepted as a proof of address by Securities and Exchange board of India for investing in stock market. Till now, it was used by SEBI as entity proof.

Aadhaar, as in Aam Admi Ka Adhikar, has resulted in a revolutionary outreach Program and is the platform for gradual uplifting of people.

*References: <https://uidai.gov.in/index.php>, <http://uidai.gov.in/what-is-aadhaar.html>*

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## Virtues of a Teacher

- To be a teacher is to have a fair share of selflessness and service.
- To be a teacher is to reflect patience and purity in his conduct.
- To be a teacher is to be heightened by the zeal of life.
- To be a teacher is to be flavored with courtesy and kindness.
- To be a teacher is to be tempered by impartiality and integrity.
- To be a teacher is to be sustained by awareness and alertness.
- To be a teacher is to be enriched by love and sympathy.

*Aarti Yadav (Asst. Prof,ECE)*

## Virtues of Education

- E stands for eradicating illiteracy.
- D stands for developing self-discipline.
- U stands for utilizing the resources of the intellect.
- C stands for cultivating creativity and critical thinking.
- A stands for acquiring all skills to make ourselves self-reliant.
- T stands for teaching the virtue of tolerance.
- I stands for inculcating the necessity of curiosity.
- O stands for obeying parents and elders.
- N stands for nurturing nobility and simplicity in life.

*Purva Jain (Lab Tech,ECE)*

## EMBEDDED SYSTEMS

Embedded computer systems, which are electronic systems, consist of a microcomputer to act upon specific out-and-out applications. Every week millions of tiny computer chips come pouring out of factories like Motorola and Mitsubishi and find their way into our everyday products. Our global economy, food production, transportation system, military defense, communication systems and even quality of life depend on the efficiency and effectiveness of these embedded systems. As Information technology and Electronics engineers, we play a key role in all phases of this effort: Planning, Design,Analysis, Mechanized, and Endorsement.The software that controls the system is programmed or fixed into ROM and is not accessible to the user of the device. Software for embedded systems typically solves only a embedded or hidden inside the device. A typical automobile now contains an average of ten to fifty Microcontrollers. In fact, upscale homes may contain as many as 200 microcontrollers, and the average consumer now interacts with Microcontrollers up to 300 times a day. General areas that employ embedded microcomputers encompass every field of engineering.

- Communications
- Military
- Medical
- Consumer
- Automotive and Machine control

The table below listing distinctive embedded microcomputer applications and the function performed by the embedded microcomputers. Each microcomputer accepts inputs, performs reckoning, and generates outputs.





## Applications of Embedded Systems by industry

### Consumer:

Washing machine  
Exercise equipment  
Remote controls  
Clocks and watches  
Games and toys Audio/video

### Communication:

Telephone answering machines  
Telephone system  
Cellular phones and pagers

### Automotive:

Automatic braking  
Noise cancellation Theft deterrent devices **Military:**

Smart weapons  
Missile guidance systems  
Global positioning systems

### Industrial:

Setback thermostats  
Traffic control system Robot systems

### Medical:

Cardiac monitors Drug delivery Pacemakers

Controls the water and spin cycles  
Measures speed, distance, calories, heart rate, logs workouts  
Accepts key touches and sends infrared (IR) pulses to base system  
Maintains the time, alarm, and display Entertains the user, joystick input, video output  
Interacts with the operator and enhances performance

Plays outgoing message, saves and organizes messages  
Interactive switching and information retrieval  
Key pad inputs, sound I/O, and communicates with central station

Optimizes stopping on slippery surfaces  
Improves sound quality by removing background noise  
Keyless entry, alarm systems

Recognizes friendly targets  
Directs ordinance at the desired target  
Determines where you are on the planet  
Adjusts day/night thresholds, thus saving energy

Senses car positions and controls traffic lights  
Input from sensors, controls the motors  
Measures heart functions Administers proper doses Helps the heart beats regularly

Prof Ankit Jain , EC Dept

## Let your Dreams turn out into Vision

Dream, dream, dream about life,  
For dreams, if life-oriented, help building up our life;  
Let your dreams be as clear as they can,  
And as inspiring as possible.  
Dream is not day-dreaming or dreaming in sleep;  
Such dreams vanish into oblivion;  
Dream, when part of planning in life, prepares you  
For a career, which eventually leads you into prosperity.  
Dream, when thought-oriented, provokes your being  
Into a state of restlessness, till the goal is realized;  
Such a dream is a manifestation of your vision,  
Which energizes your whole being.  
Dreaming about future is not building castles in the air;  
It is not escaping from responsibilities of life;  
But it drains your resources in the positive way,  
Empowering and enabling you create life out of nothing.

*Aarti Yadav, Asst Prof EC*

## The Secret of Success

Success is the driving force of all mankind;  
Many get enamored of its odour,  
And get fascinated by its thought;  
But defer from its route of hardship,  
While facing a train of hurdles and defeats.  
Some get fatigued and run away,  
Untangling themselves from the task,  
Finding the negative outcome of their labour,  
They strike a note of pessimism and sing  
The chorus of the futility of existence.  
Some face all odds, anchored in self-confidence,  
Not uprooted from their will and determination,  
Not overcome by gloom and defeat,  
But turning all obstacles into opportunities  
Opportunities for growth and development.  
To them, failures come and go, like passing clouds,  
But seldom shake them and destabilize them;  
They view life as replete with failures,  
But all failures are transmutable into success stories.  
Because of this attitude, they win and keep conquering.

*Ashna Singh, EC III, IV Year*

## Winners versus Losers

The winner is always a part of the answer.  
The loser is always a part of the problem.  
The winner always has a programme.  
The loser always has an excuse.  
The winner says, "let me do it for you".  
The loser says "that is not my job".  
The winner sees an answer for every problem.  
The loser sees a problem for every answer.  
A winner makes commitments.  
A loser makes promises.  
Winners have dreams.  
Losers have schemes.  
Winners say, "I must do something".  
Loser say, "something must be done".  
Winners are a part of the team.  
Losers are apart from the team.  
Winners see possibilities.  
Losers see problems.  
Winners see the gain.  
Losers see the pain.

*Vaishali Shukla, EC IV Year*

## College Campus- A true Teacher.

The huge college gate at the entrance  
Teaches me to cross the lane, and  
“Enter into a new world of change”.

The huge trees at the borders of campus  
Teaches me to grow high, and  
“Work hard to touch the sky”.

The food spot near the D-Block  
Teaches me to serve others, and  
“Vanish the killing hunger”.

The sports complex above the canteen  
Teaches me to work with the team, and  
“Achieve the dream”.

The auditorium, both in A and C Block  
Teaches me to build confidence, and  
“Create questions to rise”.

The central Library at the centre of college  
Teaches me to climb up the stairs, and  
“Grab the everlasting flair”.

*R Archana Nair  
BE(2nd year- IT)*

### Industrial Visit to SA Herbals (Pithampur)

An industrial visit to SA Herbals, Pithampur was organized for students of B. Pharm. I Sem. The students got exposure to different industrial sections such as raw material store, extraction unit, water purification plant, packaging section etc. It was a learning experience for the students.

### Industrial Visit to Symbiotec (Rau)

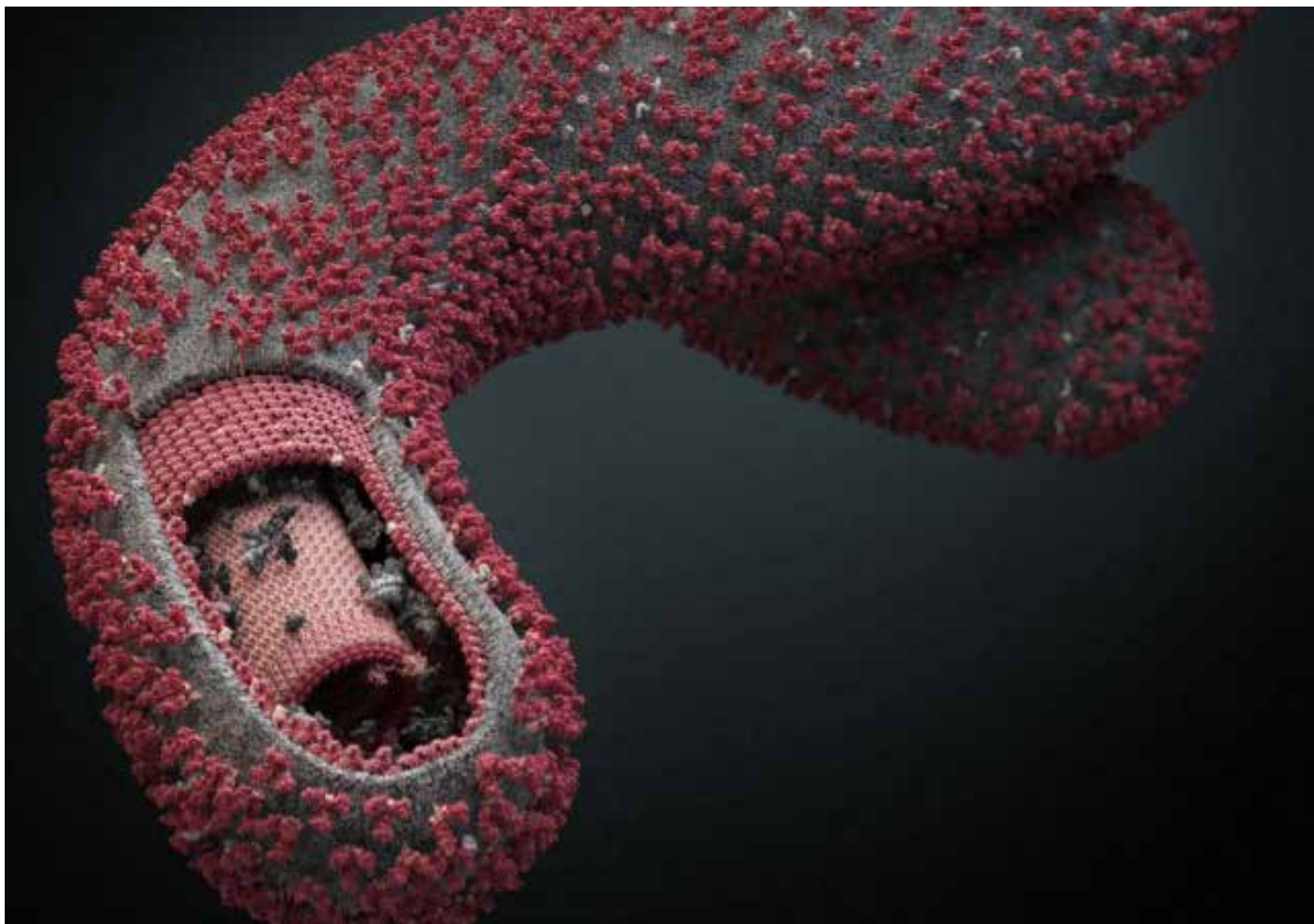
B.Pharm I sem. Students were taken to Symbiotec Pvt. Ltd., Rau to visit the manufacturing and quality control department. The students visited the steroid API Plant, raw material, reactor area and packaging area of the plant.

### Industrial Visit to Glenmark Pharmaceuticals

An industrial visit was organized for B. Pharm. 3rd Year/5th Semester students to Glenmark Pharmaceuticals. Ms. Monica Chhabra, Executive-HR and Admin Indore GGL guided the students. The students got exposure to HPLC, UPLC, GC, Stability chamber, Dissolution apparatus, and Reverse air flow laminar and different units of manufacturing plant. The students were highly enriched with the knowledge provided by the executives.

### Visit to Sanchi Milk Industry on 21/09/2015

A visit was organized by Indore Institute of Pharmacy for the B. Pharm III semester to Sanchi Sahakari milk Industry, the biggest milk products manufacturing industry of central India, Manglia, Indore (M.P). Mr Dighe, the General Manager, HR gave a glimpse of how a cooperative society runs a milk product business profitably and gave an outline of various products manufactured by Sanchi and also their new line of products including sweets made of milk. Students were given an exposure to various units of industry like milk collection unit, butter manufacturing unit etc. Students keenly observed and understood processes and unit operations essential for handling the liquids such as blending, mixing, centrifugation, fluid transfer and conveying of materials. Then the students were shown to spray drying area where milk powder is manufactured.



# EBOLA VIRUS DISEASE

**Ebola virus disease (EVD)**, also known as Ebola hemorrhagic fever (EHF) or simply Ebola, is a viral hemorrhagic fever of humans and other primates caused by ebolaviruses.

## Symptoms

Typically start between two days and three weeks after contracting the virus with a fever, sore throat, muscular pain, and headaches. Then, vomiting, diarrhea and rash usually follow, along with decreased function of the liver and kidneys. At this time some people begin to bleed both internally and externally. The disease has a high risk of death, killing between 25 and 90 percent of those infected, with an average of about 50 percent. This is often due to low blood pressure from fluid loss, and typically follows six to sixteen days after symptoms appear.

## Risk of Exposure

Ebola viruses are found in several African countries. Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks of Ebola among humans have appeared sporadically in Africa.

## Risk

Healthcare providers caring for Ebola patients and family and friends in close contact with Ebola patients are at the highest risk of getting sick because they may come in contact with infected blood or body fluids. Ebola also can be spread through direct contact with objects (like clothes, bedding, needles, syringes/sharps or medical equipment) that have been contaminated with infected body fluids. Additionally, people can become sick with Ebola after coming in contact with infected wildlife. For example, in Africa, Ebola may spread as a result of handling bushmeat (wild animals hunted for food) and contact with infected bats.

It is also possible that Ebola could be spread through sex or other contact with semen from person who have survived

## Ebola

CDC and other public health partners are continuing to study Ebola transmission and will share what is known as it becomes available.

## Diagnosis

Diagnosing Ebola in a person who has been infected for only a few days is difficult because the early symptoms, such as fever, are nonspecific to Ebola infection and often are seen in patients with more common diseases, such as malaria and typhoid fever. However, a person should be isolated and public health authorities notified if suspected of early symptoms of Ebola and sample from patient to be tested to confirm infection.

### Laboratory tests used in diagnosis include:

Timeline of Infection	Diagnostic tests available
Within a few days after symptoms begin	<ul style="list-style-type: none"><li>• Antigen-capture enzym-linked immunosorbent assay (ELISA) testing</li><li>• IgM ELISA</li><li>• Polymerase chain reaction (PCR)</li><li>• Virus isolation</li></ul>
Later in disease course or after recovery	<ul style="list-style-type: none"><li>• IgM and IgG antibodies</li></ul>
Retrospectively in deceased patients	<ul style="list-style-type: none"><li>• Immunohistochemistry testing</li><li>• PCR</li><li>• Virus isolation</li></ul>

## Treatment

No FDA-approved vaccine or medicine (e.g., antiviral drug) is available for Ebola.

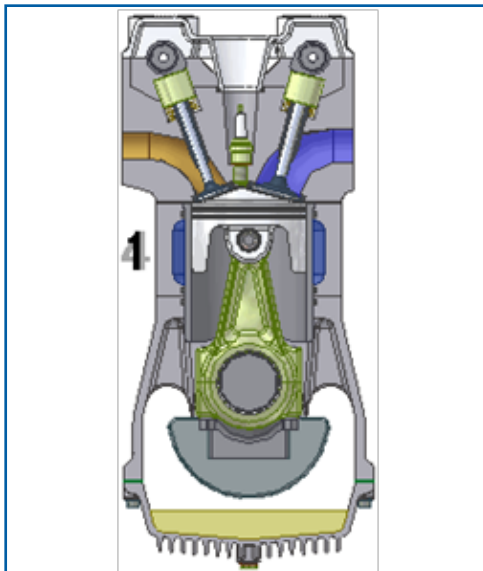
Symptoms of Ebola and complications are treated as they appear. The following basic interventions, when used early, can significantly improve the chances of survival:

- Providing intravenous fluids (IV) and balancing electrolytes (body salts).
- Maintaining oxygen status and blood pressure.
- Treating other infections if they occur.

Recovery from Ebola depends on good supportive care and the patient's immune response. People who recover from Ebola infection develop antibodies that last for at least 10 years, possibly longer. It is not known if people who recover are immune for life or if they can become infected with a different species of Ebola. Some people who have recovered from Ebola have developed long-term complications, such as joint and vision problems.

Even after recovery, Ebola might be found in some body fluids, including semen. The time it takes for Ebola to leave the semen is different for each man. For some men who survived Ebola, the virus left their semen in three months. For other men, the virus did not leave their semen for more than nine months. Based on the results from limited studies conducted to date, it appears that the amount of virus decreases over time and eventually leaves the semen

# Internal Combustion Engine



The internal combustion engine is an engine in which the burning of a fuel occurs in a confined space called a combustion chamber. This exothermic reaction of a fuel with an oxidizer creates gases of high temperature and pressure, which are permitted to expand. The defining feature of an internal combustion engine is that useful work is performed by the expanding hot gases acting directly to cause movement, for example by acting on pistons, rotors, or even by pressing on and moving the entire engine itself.

Typically an ICE is fed with fossil fuels like natural gas or petroleum products such as gasoline, diesel fuel or fuel oil. There's a growing usage of renewable fuels like bio-diesel for compression ignition engines and bioethanol or methanol for spark ignition engines. Hydrogen is sometimes used, and can be made from either fossil fuels or renewable energy.

Now there are interesting discussions on Fuel and retrofitting on IC Engines. What Methonol Water mix was to take

care of pour point reduction and maintain the conductivity of water used to be a challenge! Of course that was for airplane engines. Now we talk about low power engines retrofitting to improve performance or reduction in engine temperature in dry hot places. We also have to consider including Metallurgical properties. If water used of poor quality, the same will lead to higher levels of pitting and it shall bring down the performance and induce higher cost maintenance. This can also be corrected by specific lube oil with VI for such places. The Automobile Industries had a big lobby to defer introduction of E4/5. Perhaps they are not ready to bring engines to match Govt. directions on Air Pollution. Whereas oil industry was forced to introduce E4 fuel in the market. In our view, that since the temperature of engine is so high how a minor differential temperature in ambient temperature going to make a big change in heating the engine.



Water has a very high heat of vaporization. As the ambient temperature water is injected into the engine, heat is transferred from the hot cylinder head/ intake air into the water. This causes it to evaporate, cooling the intake charge. A cooler intake charge means it is more dense (higher volumetric efficiency) and also will have a lower tendency to knock. However the water vapor will displace some air, negating some of the denser intake charge benefit. Knocking is generally more of a problem in forced induction engines rather than naturally aspirated so this can be a useful aid in its prevention. On electronic ignition systems the ignition timing is generally retarded to prevent knock from occurring but with water injection it can be advanced closer to Maximum Brake Torque (MBT) timing for additional power.

Piston engined petrol aircraft, utilized water injection technology prior to the World War-II in order to increase takeoff power. This was used so that heavily laden fighters could take off from shorter runways, climb faster, and quickly reach higher altitudes to intercept enemy bomber formations. Some fighter also used water injection to allow higher boost in short bursts during dogfights.

Where very high power-to-weight ratios are required, internal combustion engines appear in the form of combustion turbines or Wankel engines. Powered aircraft typically uses an ICE which may be a reciprocating engine. Airplanes can instead use jet engines and helicopters can instead employ turboshafts; both of which are types of turbines. In addition to providing propulsion, airliners may employ a separate ICE as an auxiliary power unit. Wankel engines are fitted to many unmanned aerial vehicles.

## Big Diesel generator used for backup power Combined cycle power plant

ICEs drive some of the large electric generators that power electrical grids. They are found in the form of combustion turbines in combined cycle power plants with a typical electrical output in the range of 100 MW to 1 GW. The high temperature exhaust is used to boil and super-heat water to run a steam turbine. Thus, the efficiency is

higher because more energy is extracted from the fuel than what could be extracted by the combustion turbine alone. In combined cycle power plants efficiencies in the range of 50% to 60% are typical. In a smaller scale Diesel generators are used for backup power and for providing electrical power to areas not connected to an electric grid.



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# Spiritual Fasting: A Means to Human Quality Enhancement

Life is a complex process and passes through many ups and downs clouding our minds with a high degree of stress, draining out our positive energies. Have our lives become like conveyer belts where we have not much control over our deeds or instead, we reflect patterns of the insane culture in which we live. And so we have millions of teenagers trying to find themselves in fashion, music, and subcultures. Growing up without identity, introducing Generation X. Cappuccino or espresso, cherry-red or turquoise, ranch-style or split-level, liberal or conservative, little empty circles of self-expression that ends in a spiritual vacuum. We see many persons slipping into depression, into hollowness, into meaningless living.

Today's generation is desperately trying to find a new spiritual identity. (We may or may not admit that) We have surrounded ourselves with a plethora of techno-gizmos that furnish an illusion of being in control. The feeling of mobility provided by computers, TV and internet are able to hide the powerlessness we have over our own inner will and emotions. This impression of power is a well-contrived veneer, hiding the uncontrollable storms of the soul, storms, fed by emptiness, hopelessness and depression that plague a cold super-computer world.

On the other hand we see numerous people making wealth through unfair means, running after material comforts in life without any limits. We also see examples of unlimited greed in form of Bank defaulters and others who cheated on public money for their own greed. There is no end to it.



## So where is your line in the sand of wilderness of the world?

We have had numerous literatures on Meditation, Yoga, spiritual pursuits to calm down the mind and body, to look within and be composed. We practice many forms of prayers and even rituals to take our minds off from stress. We also restore to fasting for days as part of our religious rituals for self-purification and to de-stress ourselves. Fasting is a knife that cuts away superficiality, getting to the bone. Effective, because it is able to break up daily patterns upon which you have become so dependent. When those patterns of pleasure are removed, you are left with your own internal resources. If those resources are bankrupt, then during fasting, you will come face to face with a vacuum that only God can fill.

Fasting accomplishes two purposes. First, it reveals how much the flesh has taken control of your emotions. And secondly, it serves in breaking the flesh's hold upon the will. Fasting invariably brings to the surface deep seated fears which affect thinking and decision-making. It does this by challenging that complex human instinct called self-preservation.

The Physical fasting is simply a restraint from eating physical food: physical detachment. All religions have advocated Material Fasting; but the greater detachment is the spiritual fast: detachment from all desires of the self. Spiritual fasting has been practiced by saints over ages, detaching themselves from the material gains, aiming at spiritual gains. We have the example of Lord Buddha and Sri Sri Ramakrishna Parmahans in the recent past, who practiced spiritual fasting by detaching themselves from the worldly comforts in pursuit of the divine light. However, in day to day life for the common human beings, it may not be possible to stay away from home and family, from job or from any other work that brings them their livelihood. In such case how this can be practiced?

Spiritual Fasting is staying away from the GREED, in very simple terms, being with your value system. Greed that we see in many forms, people trying to accumulate for themselves and for their younger generations in form of houses, properties, wealth and material goods, which fulfills their ego and puts up a show of ornamentation but the hollowness within is neglected. Hence, it is imperative that, in the career building race we do not tend to neglect the health of our INNER SELF and ensure that the inner

vacuum does not take place. The very indicator of inner illness is expression of frustration, suffering from a degree of insecurity. Our disturbed mind finds its expressions through our insane behavior, misbehaving with our parents, spouse, friends' etc. which is an outburst of our depressive status of mind. Let's resolve this and take control of ourselves.

Practicing Spiritual Fasting may look harder to attain, but abstaining from greed is the first step as Mahatma Gandhi showed us the path. He too practiced and advocated the concept and said, 'there is enough for everyone's needs but not for greed'. You may not have time for practicing various religious rituals in your busy life schedule but try to achieve higher spiritual goals by cleansing your mind and keeping away from the temptations of all kinds. You may try meditation in any form which will cleanse your mind. Even giving water to a thirsty person is a form of meditation, when spirit is involved in a good deed.

Spiritual Fasting is simple, if you open up your mind and develop empathy towards the needy. Giving and sharing, understanding and responding to another person will help you reach a stage of perpetual happiness, happiness from within your inner self.

*Bonani Dhar*  
*Development Sociologist & Human Resource Specialist*  
*Ex-World Bank & UN*

# Wake Up!!!

Wake up a Mother in you, who can care for you,  
“And build a better environment to live on”.

Wake up a Father in you, who can support you,  
“And lend his responsible shoulders to move on”.

Wake up a Brother in you, who can hold you,  
“And build a secure layer for you to live on”.

Wake up a Sister in you, who can bring laughter in you,  
“And make you feel better to move on”.

Wake up a Son in you, who can bring craze in you,  
“And make you enjoy your life to live on”.

Wake up a Daughter in you, who can assure you,  
“And build a new hope to move on”.

Wake up a Teacher in you, who can guide you,  
And make you learn from your mistakes to live on”.

Wake up a Friend in you, who can talk to you,  
“And transform you into a new person to move on”.

*R Archana Nair*

*BE(2nd year- IT)*

# Things to be happy about



Remember the little moments, for one day you may look back and realize they were the sweet memories.

“When the times are tough it’s difficult to see the forests for trees. Everything becomes dire and full of despair”.

Time is speeding up with technologies, we are not happy with the big things we have, but in 90’s, we found big happiness in small things stuff which can’t be replaced with anything in the world.

Smell of new books, smell of earth, sunshine, evening sun set, cuddling a dog, getting a free period all of sudden in college, preparing paper boat, being able to see star, sound of a child laughing, a mother’s hug, catching up with old friends, old photos, moment when you search for ball and you get an extra ball, compliment from strangers, birthday menu, malgudi days, alif laila, shaktiman, hatim, small wonder, dream of jinni, aahat, scooby dooby doo, powerpuff girls, edd and eddy, videogames, mobile games-bounce, snake, space impact, comics chacha Choudhary, pinky champak, billu nagraj, chochlates-kismii bar swad, pan parag, gatagat, boomer, orange candies, guru chaila, games - raja mantri chor sipahi, ashta-changa, ludo, chidiya udd, snakes and ladder, carom, hide and seek, gilli danda, godha bdam chahi, steppooo, playing cricket with books page number, the moment you got out on the first ball while playing cricket and you say- “ye trial ball thi”, “Oye bol pencil- teri shaadi cancel/Oye bol tree- chal yeh le do thappd free”

“There is a beautiful thing inside you that is thousands of years old. Always find time for the things that make u feel happy to be alive”.



## भारत को दलि केवावे पर पूरा देश को ताज मालवो

आखी दुनयिया में अगर स्वर्ग हे तो उ हे मालवो  
तुलजा भवानी ने हरसदिदी माता को दुलार मालवो  
आखी दुनयिया के कपडा परियाया रुई को भंडार मालवो  
मीठी मीठी मालवी बोलने वाला को संसार मालवो  
कई गेहू ने कई जवार अन्न को भंडार मालवो  
कई मंदिरि ने कई मसजदि सदभावना को द्वार मालवो  
अहलिया माता का न्याय की सोगात हे मालवो  
ना कदी बाड़ ना कदी काळ एसो सुशांत मालवो  
कदी नपिड्यो काळ, महाकाल को मान हे मालवो  
मांडव का महल, इंदौर की छत्री हे इतहिस मालवो  
काली मटिटी और नदी की माला पैरे हे मालवो  
महाकाल और उकारेश्वर को वशिराम हे मालवो  
संदीपनी आश्रम जैसी सक्षिषा को धाम हे मालवो  
कई आइ आइ टी ने कई आइ आइ ऍम ,  
सक्छिा में भारत का सीर को ताज हे मालवो  
भारत को दलि केवावे पर पूरा देश को ताज मालवो  
आखी दुनयिया में अगर स्वर्ग हे तो उ हे मालवो।

राजेश भंडारी

### जिन्दगी में इन्सान की महत्वता

जिन्दगी जब मिलती है एक ही बार, व्यर्थ इसे करो मत ।  
बनो परिश्रमी और खुद्दार, पीछे तुम हटो मत ॥

कभी ना करो चापलूसी किसी की, खुषामद कभी तुम करो मत ।  
कर सको तो करो भला तुम, पर किसी से जलो मत ॥

ना करो भरोसा किसी पर, धोखा किसी से करो मत ।  
करे जो कोई बुरा तुम्हारा, बुरा उसका कभी तुम करो मत

ईध्वर उसको देख रहा है, तुम व्यर्थ चिंता करो मत ।  
बस कार्य करो ईमानदारी से अपना, और किसी से डरो मत ॥

by: Vishal Puranik  
(Asst. Prof.IIP)

सूरज से निकली किरणों मेरी आँखों में समा गयी,  
मुझे आज गुरु की महिमा याद आ गयी ।

जिसने अज्ञानी को ज्ञानी बनाया,  
जिसने अँधेरे से उजाले में लाया,  
जिसने ज्ञान से विज्ञान बनाया,  
जिसने इंसान को वैज्ञानिक बनाया,  
जिसने धरती से आकाश को मिलाया।

ना कोई तस्वीर ना कोई कहानी है,  
ना कोई जंजीर ना कोई निशानी है ।  
गुरु का धरती पर होना इत्तेफाक नहीं हो सकता,  
यह तो कुदरत की हम पर कोई मेहरबानी है ॥

गुरु की महिमा ने आज हम सब को जगा दिया,  
अज्ञानी को ज्ञानी बना दिया,  
यू तो है बहुत शिष्य,  
लेकिन आरुणि एकलव्य की भक्ति ने,  
आज हमें गुरु का वर्णन बता दिया ।

किस्मत पर एतबार किसको है,  
मिल जाये गुरु का ज्ञान इंकार किसको है ।  
गुरु के बिना यह जगत अधूरा है,  
मिले गुरु का साथ तो ये जीवन पूरा है ।  
गुरु के ज्ञान का ना कोई आकार है,  
गुरु की महीना अपरमपार है ॥

# विधार्थी और अनुशासन

विधार्थी जीवन में अनुशासन का बहुत महत्व होता है। अनुशासन के द्वारा ही वह स्वयं के लिये उज्ज्वल भविष्य की संभावना कर सकता है। यदि उसके जीवन में अनुशासन नहीं होगा, तो वह जीवन की दौड़ में सबसे पिछड़ जाएगा। उसकी अनुशासनहीनता उसे असफल बना देगी। विधार्थी के लिए अनुशासन में रहना और अपने सभी कार्यों को व्यवस्थित रूप से करना बहुत आवश्यक है। यह वह मार्ग है जो उसे जीवन में सफलता प्राप्त करवाता है। विधार्थी को बचपन से ही अनुशासन में रखना चाहिए। अनुशासन में रहने की सीख उसे अपने घर से ही प्राप्त होती है। विधार्थी को चाहिए कि विद्यालय में रहकर विद्यालय के बनाए सभी नियमों का पालन करे। अध्यापकों द्वारा पढ़ाए जा रहे सभी पाठों का अध्ययन पूरे मन से करना चाहिए। अध्यापकों द्वारा घर के लिए दिए गए गृहकार्य को नियमित रूप से करना चाहिए। समय पर अपने सभी कार्य करने चाहिए।

“अनुशासन सफलता की कुंजी है”—यह किसी ने सही कहा है। अनुशासन मनुष्य के विकास के लिए बहुत आवश्यक है। यदि मनुष्य अनुशासन में जीवन-यापन करता है, तो वह स्वयं के लिए सुखद और उज्ज्वल भविष्य की राह निर्धारित करता है। मनुष्य द्वारा नियमों में रहकर नियमित रूप से अपने कार्य को करना अनुशासन कहा जाता है। यदि किसी के अंदर अनुशासनहीनता होती है तो वह स्वयं के लिए कठिनाई की खाई खोद डालता है। विधार्थी हमारे देश का मुख्य आधार स्तंभ हैं। यदि इनमें अनुशासन की कमी होगी, तो हम सोच सकते हैं कि देश का भविष्य कैसा होगा।

विधार्थी को चाहिए कि प्रतिदिन प्रातःकाल उठकर व्यायाम करे, अध्यापन करे, बड़ों का सम्मान करे, स्नान आदि करे और विद्यालय के लिए शीघ्र ही तैयार हो जाए। समय पर विद्यालय जाए। घर आकर समय पर भोजन करे, समय पर अध्यापन कार्य और खेलने भी जाए। रात्रि के भोजन के पश्चात् समय पर सोना भी विधार्थी के लिए उत्तम रहता है। इस तरह की व्यवस्थित जीवन-शैली उसे तरोताजा रखती है और जीवन में स्वयं को सद्दृढ़ भी रखती है।

यदि आँखें उठा कर देखा जाए तो अनुशासन हर रूप में विद्यमान है। सूर्य समय पर उगता और समय पर अस्त हो जाता है। जीव-जन्तु भी इसी अनुशासन का पालन करते हुए दिखाई देते हैं। पेड़-पौधों में भी यही अनुशासन व्याप्त रहता है। घड़ी की सुई भी अनुशासन का पालन करते हुए चलती है। ये सब हमें अनुशासन की ही शिक्षा देते हैं।

यदि दृष्टि डाली जाए तो समाज में चारों तरफ अनुशासनहीनता दिखाई देती है। यही कारण है कि देश की प्रगति और विकास सही प्रकार से हो नहीं पा रहा है। यदि विधार्थियों में अनुशासन नहीं होगा तो समाज की दशा बिगड़ेगी और यदि समाज की दशा बिगड़ेगी तो देश कैसे उससे अछूता रहेगा। हमें चाहिए कि विद्यालय में अनुशासन पर जोर देना चाहिए। विधार्थियों का मन चंचल और शरारती होता है। अनुशासन उनके चंचल मन को स्थिर करता है। यह स्थिरता उन्हें जीवन में संघर्ष में दृढ़तापूर्वक आगे बढ़ने में सहायक होती है। यह सब अनुशासन के कारण ही संभव हो पाता है।



उमाशंकर सैनी

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## भ्रूण हत्या

एक माँ ने अपना सोनोग्राफी चेक अप करवाया  
अपने पेट में पलते कन्या भ्रूण को घूमते पाया  
बेटे की चाह में भ्रूण हत्या का विचार मन में आया  
उसी रात उसे पेट में पलते भ्रूण का स्वप्न आया  
स्वप्न में पेट में पल रही बच्ची रो रही थी  
सुंदर-सी मासूम अबोध बच्ची कुछ यूँ बोल रही थी  
क्यों मुझ अजन्मी बच्ची को जन्म से पहले मार रहे हो  
क्या बिगाड़ा है मैंने तुम्हारा जो भ्रूण में ही मार रहे हो  
मैं तो वो मासूम कली हूँ जो अभी तक खिली भी नहीं हूँ  
मैं तो तुम्हारी ही अंश हूँ जो तुमसे मिली भी नहीं हूँ  
धिक्कार है ईसानों को जो बेटा बेटा का भेद करते है  
तुमसे तो पशु पक्षी अच्छे जो नहीं ये भेद करते हैं  
क्यों विज्ञान से ऐसी ये सोनोग्राफी मशीन बनवाई  
चंद सिक्कों में जमीर बेच हमारी हत्या करवाई  
न मारो मुझे मातापिता में तुम्हारे भाग्य की लक्ष्मी हूँ  
मैं पलट सकती हूँ तुम्हारा भाग्य वह धनलक्ष्मी हूँ  
मैं तुम्हारे आँगन की तुलसी हूँ घर का शृंगार हूँ  
मैं तुम्हारे संस्कारों की खशबू तुम्हारा वृँदनवार हूँ  
ये जो वृद्धाश्रम में रह रहे पूछना कितना पुत्र सुख पा रहे  
इन्होंने भी भ्रूण हत्या करवाई उसका फल ये भी तो पा रहे  
पछताते काश इनकी भी एक बेटा इस दुनिया में होती  
कम से कम इनकी सुधबुध लेती साथ तो देती  
अगर माँ वृद्धाश्रम से बचना है तो मुझे इस दुनिया में लाओ  
बेटा बेटा का भेद अपने जेहन से तुम दूर भगाओ  
देखो सरकार कितनी सुविधाएँ बेटियों के लिये दे रही  
लाडली लक्ष्मी कन्या जन्म शिक्षा सुविधा आदि दे रही  
अब मैं बोझ नहीं हूँ इस सैसार को चलाने वाली हूँ  
मुझको जन्म दो माँ मैं तुम्हारे यहाँ आने वाली हूँ  
अचानक स्वप्न टूटा माँ की आँखें खुल गई  
माँ बोली सचमुच आज मेरी तो आँखें खुल गई।

by Dronacharya Dubey

## मालवी कविता

तू पाछी आई जा चरकली(गौरय्या)

तू पाछी आई जा म्हारी चरकली रानी,  
सुनो हे थारा बिना म्हारो घर आँगन  
सुना खेत खलिहान सुनो हे म्हारो मन,  
चरकला का साथे आई जा ची ची करती  
आँगन में चहकती चोच में चुग्गो भरती,  
आगणा में रखयो हे सरावलो पानी को  
परिवार में स्वागत हे चरकली रानी को,  
झाड़ लगाया हमने घर आंगन खेत में  
नरबदा माँ लाया हे छिप्रा माँ की रेत में  
थारीची ची में सुकून उ नि कनी संगीत में,  
नि निकाला गा थारा घोसला अब आंगन से  
प्यार से पालजे बच्चा दिके चुग्गा चोचन से,  
जल्दी आइजा म्हारी चरकली चरकला का साथे  
थारो परिवार भी रेगो म्हारा परिवार का साथे ।

राजेश भंडारी



## कई बतावा दादा एक तो दुबला ने ऊपर से दो असाड

पगार मिलतेज अखो घर टूटी पड़्यो,  
फरमाइस सुणी सुणी के कान बेरो पड़्यो ,  
दूध किराणा वालो भी दरवाजा पे खड़्यो,  
ऊपर से आयग्यो किस्त को पहाड़ ,  
एक तो दुबला ने ऊपर से दो असाड ।

जितरा रुपया में हम अखी उम्र पड़्या,  
छोरा छोरी इतरा में ५ किताब नि चड़्या,  
घणो खायो दूध घी ने घणी कुस्ती लड़्या,  
अबे तो हर महीने करनी पड़े जुगाड़ ,  
एक तो दुबला ने ऊपर से दो असाड ।

राजा तो रिया नि ने एठ्वाडिया राजा हुड़ग्याँ ,  
आखा देश के लुटियो ने खोदी खोदी के खाईग्याँ,  
इनकी संख्या एतरी हुड़गी के छोटी पड़ी तिहाड़ ,  
कई बतावा दादा एक तो दुबला ने ऊपर से दो असाड ।

जद भी भ्रस्टाचार की बात करो नेता खिस्स्या काड़े,  
मोटी कोरट सवाल पूछे तो झूट का झंडा गाड़े ,  
पुलिस वाला डंडा मारे ने औरतो का कपडा फाड़े ,  
पर अब कोरट भारी पड़ी गी ऊट का ऊपर हूओ पहाड़ ,  
कई बतावा दादा एक तो दुबला ने ऊपर से दो असाड ।

राजेश भंडारी

# The “Do as I say, Not as I Do” *Parenting Style Doesn’t Work Anymore*

Have you ever done research on different parenting styles in order to choose the best one for you and your family? Or, do you approach parenting from your experience of how you were raised as a child. Perhaps you have said to yourself, “I will not raise my children the way parents raised me” or “My parents spanked me and I turned out okay , so spanking will work on my children.” Both responses are “knee jerk” reactions on how to parent, not a choice founded on sound child rearing principles.

You may not even question your parenting style until you start having problems with your children. It may seem like suddenly your current parenting style isn’t work anymore and you don’t know why. Many such problems were considered by Diana Baumrind, Clinical and Developmental Psychologist from U.S, who focused on various parenting styles namely Authoritarian, Permissive , Uninvolved, Authoritative Parenting.

The child of an authoritarian parent – a parent who offers too much structure and too little communication – often feels insecure, performs for approval, and connects approval with love. He may have low self esteem and have difficulty in social relationships. Further, he may break out when away from mom and dad by misbehaving.

A child of a permissive parent who is raised without structure may have difficulty self managing his behavior. Freedom without limits can be destructive to child’s development; without consequences, children don’t have a sense of boundaries. As a result, the child from a permissive home will seek structure to help them feel value, validated and secure. He may have problems with relationships and lack the self discipline necessary for social interaction with his peers.

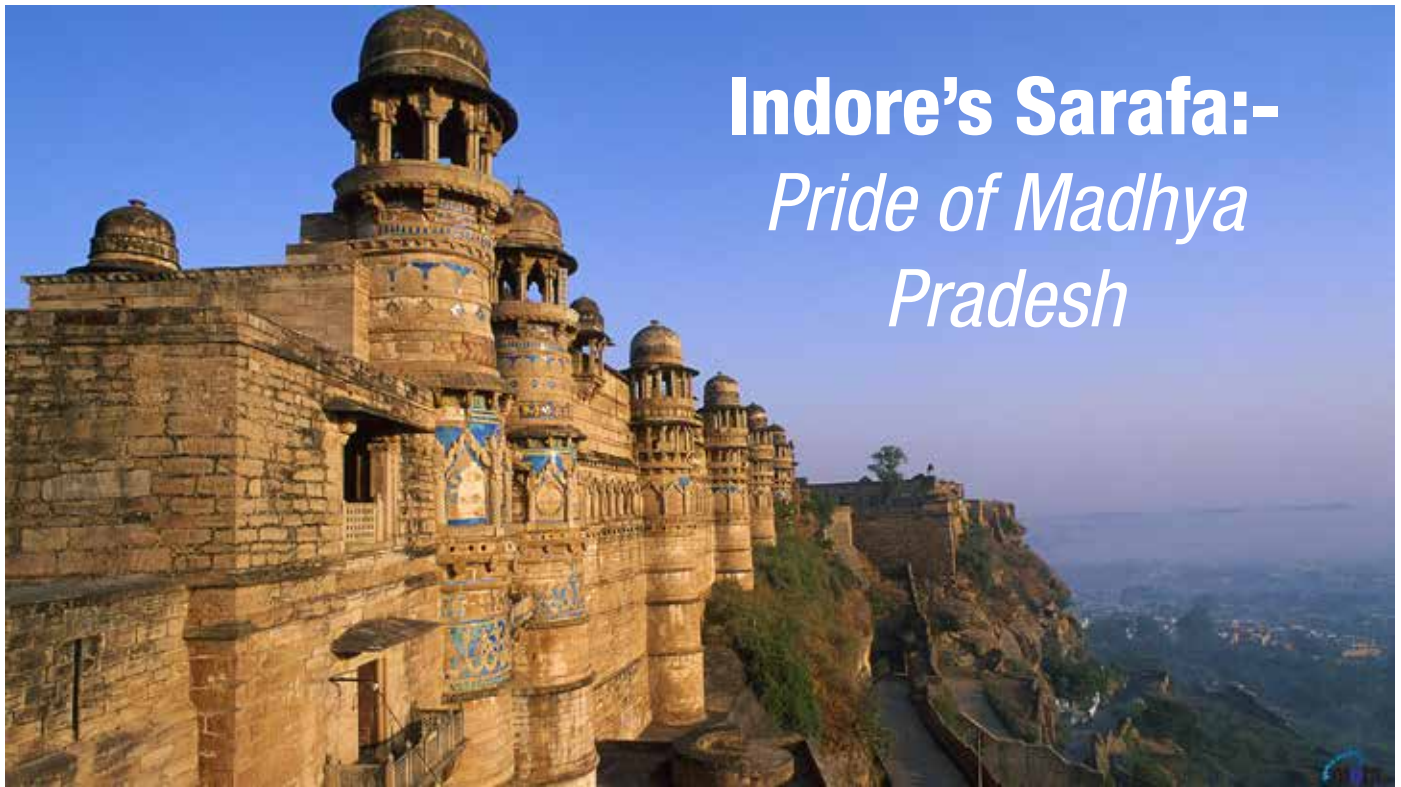
Children of uninvolved parents face negligence which can be very dangerous to a child because it affects its sense of self esteem and well being. This impacts a child’s ability to trust – not only relationships, but also adults. It also makes him take on responsibilities far too early, robbing him of his childhood. Children of uninvolved parents often have problems with intimacy and friendship with their peers.

Authoritative parents regularly communicate expectations and potential consequences, thereby raising a child in an environment that provides both security and confidence, which helps build his self esteem. Because of the example his parents set for him, he learns valuable social skills and is able to have healthy relationships with others.

A major obstacle in family systems research is the question of relevance. Much research shows that the authoritative and flexible parenting styles is optimal for the middle-class child from a nuclear family, but the same may not be true for other children growing up in other circumstances and situations. Allowing children flexibility and freedom may result in positive outcomes when children live in safe areas and their peers are less likely to engage in dangerous behavior, but in high risk neighbor hoods, higher degrees of parental control might be necessary.

In a nutshell I would like to say that parents must parent – you must be what you want to see. From a very young age, child mimics you and your behavior and always watching. What you teach through parenting style has the potential to affect every aspect of his life – from academics to his relationships with others.

*Mehazabeen Kachchawala*  
*III year, IIP*



# Indore's Sarafa:- *Pride of Madhya Pradesh*

There is saying "There is no sincerer love than the love for food" -Gerorge Bernard Shaw  
Sarafa Bazaar, "A Brand of Indore", is famous for Jewellery has also been heaven for Food Lovers. Local populace as well as tourists throng Sarafa Bazar at night. Needless to say that it is completely safe to go there and experience the exotic food stuff that every foodie should experience at least once in life time. Sarafa of Indore is the place for all foodies to get mouth watering dishes till midnight

Traditional Indian savories, sweets and local street foods are available after Jewellery shops are closed in the night. Eateries come up with unique delicious dishes like garaadu, bhutte ka kees, sabudana ki khicidi which creates a thumping impression not only in the minds of locals but also amongst the visitors coming from other places of India and abroad and sarafa eateries is a must visit place in their itinerary. There are several other dishes like the regular Indore Kachori, Samosas, aloo chaat, maalpuua, jalebi, dahi chaat, aam ras, ice creams and also Indian style Chinese. Students who want to de stress from studies, families who want to chill find Sarafa market the right place to hang around.

Few popular food joints of Sarafa are:-

Sarafa: -Joshiji ka dahiwada (started in 1977): Going to have a dahiwada here is not just about the taste, but it's also about the experience of watching the founder Ram Chandra Joshi's son Om Prakash Joshi make the dahiwadadas. Joshiji is a performer. He flips the dahiwada with the curd without spilling a drop. He also does a quick magic show. After pouring curd in your bowl, he sprinkles five spices using just one finger without allowing them to mix together. Of course, you have to make it there before 11pm, otherwise there is no way you will get a dahiwada.

Saawariya ki sabudana khichdi: Yummy and unique, Om Prakash Vyas has his own style of making the sabudana khichdi that his father started making in 1983.

Saawariya ka bhutte ka khees: This Indori unique concoction is made of corn dana that is boiled, fried in ghee and then mixed with besan, hing, jeera, dhaniya and -Vijay ki kachori: A must try is Vijay's special kachoris that, of course, finishes by 10pm.

Also, a visit to Sarafa is not complete without having Nagori ki chikanji, Anna ka paan and your pick of sweets that include the best jalebis, gulaab jamuns, kulfis and rabris.

*Mrs.Neha Gupta*  
*H.O.D.IT*

# Big Data: *The Next Frontier for Innovation, Competition, and Productivity*

Gartner defines Big Data as high volume, velocity and variety information assets that demand cost effective, innovative forms of information processing for enhanced insight and decision making. Every day, we create 2.5 quintillion bytes of data. According to IBM, 80% of data captured today is unstructured and all of this unstructured data is Big Data.

For organizations of all size, data management has shifted from an important competency to a critical differentiator that can determine market winners. These organizations are defining new initiatives and reevaluating existing strategies to examine how they can transform their business. Said differently, the volume, velocity or variety of data is too great. But today, new technologies make it possible to realize value from bigdata. For example, retailers can track user web clicks to identify behavioral trends that improve campaigns, pricing and stockage.. Governments and even Google can detect and track the emergence of disease outbreaks via social media signals. Oil and gas companies can take the output of sensor in their drilling equipment to make more efficient and safer drilling decisions. Specifically, Big Data relates to data creation, storage, retrieval and analysis that is remarkable in terms of volume, velocity and variety:

**Big Data Career Opportunities:** Big Data isn't just the exclusive property of big web properties such as Google, Facebook, eBay and Yahoo. While these companies blazed the path in harnessing the analytic power of big data, organizations of all different sizes and industry groups are now leveraging big data in many ways as well.

After cloud, is Big Data the next big opportunity for Indian IT services providers? Big Data is a huge and colossal opportunity. Consider these facts: A joint study by NASSCOM and CRISIL. Global Research & Analytics suggests that by 2015, Big Data is expected to become a USD 25 billion industry. The report estimates that the Indian Big Data industry will grow from USD 200 in 2013 to USD 1 billion in 2015 at a CAGR in excess of 83 percent.

Looking for a job in IT sector? Consider big data analytics and cloud computing – hot areas that IT companies may recruit people for in 2016, say HR experts. Consulting firms McKinsey estimates that India needs two lakh data scientists in the next few years. The entry level annual

salary for data analytics professional is Rs 6-9 lakh while it is Rs 5-8 lakh for big data professionals. Online job portals like HeadHonchos.com and Naukri.com too feel that data analytics and cloud computing will be the top picks in 2014.

## **Big Data Research Opportunities:**

It is now possible to manage the volume, velocity and variety of big data using software, so the focus in the industry is shifting towards how we can use analysis to extract Value. Many of the analytical techniques we use in market research can be successfully employed to analyze Big Data, which is why the market research is perfectly placed to embrace the opportunity that it provides.

## **An overview of the key trends in Big Data:**

1. Availability of increasingly sophisticated data aggregation software: It is now possible to mine structured data alongside unstructured data sources to merge data sets that were previously incompatible.
2. The importance of “filtering” & “tagging”: with the amount of data generated, companies need to filter which sources to be sorted and tag in real time the ones that should be analyzed.
3. Monetization of Big Data: Monetization takes two main forms: selling the data collected in the market or analyzing data to improve business performance.
4. An increasing focus to analytics to extract value: The key to exploiting opportunities provided by Big Data lies in understanding underlying data structures and then applying appropriate analytics techniques to extract insights.

## **Research Areas**

**Database Queries:** How can we efficiently resolve database queries on massive amounts of input data? Here the input data may be presented in the form of a distributed data stream.

**Machine Learning:** How can we efficiently solve large-scale machine learning problems? Here the input data may be massive, sorted in a distributed cluster of machines.

**Distributed Computing:** How can we efficiently solve large-scale optimization problems in distributed computing environments? For example, how can we efficiently solve large-scale combinatorial problems, e.g. processing of large scale graphs?

*Ms. Disha Surana & Ms. Jayshri Upadhyay*  
*Assistant Professor*  
*MCA*

# BIOFUEL AS DIESEL SUBSTITUTE:

## *PROBLEMS AND POSSIBLE SOLUTIONS*

Energy is an essential factor for economic growth. However, importing petroleum from overseas, affects the country's balance of payment every year and every country is trying to find a energy source that can replace petroleum specially, vegetable oil. Nevertheless, the pure vegetable oil cannot be used directly in engine as fuel because of the problem associated with it. A potential diesel oil substitute is Biodiesel, consisting of methyl ester of fatty acids produced by the transesterification reaction of triglycerides of vegetable oils and methanol. Biodiesel is also better than diesel fuel in terms of sulphur content, flash point and aromatic content.

### **Some of the advantages of using vegetable oil as fuel are:**

- (i) Vegetable oil is produced domestically and saves foreign exchange.
- (ii) Development of the bio-diesel industry would strengthen the domestic, and particularly the rural, agricultural economy of agricultural based countries like India;
- (iii) It is renewable, biodegradable, low aromatics, low sulphur and non-toxic;
- (ix) Enhanced lubricity, thereby no major modification is required in the engine;
- (x) Personal safety is improved (flash point is 100 °C higher than that of diesel);

### **Major challenges for use of vegetable oil as I.C. engine fuels are listed below**

- a. Feed stock price variation, homogeneity, consistency and reliability are questionable;
- b. Storage and handling is difficult (particularly stability in long term storage);
- c. Flash point in blends is unreliable;
- d. Compatibility with engine material needs to be studied further;
- e. Cold weather operation of the engine is not easy with vegetable oils;
- f. High carbon residue causes heavy smoke emission and carbon deposition on the injection nozzle tips and in the combustion chamber.
- g. There are also problems of incompatibility with engine lubricants.
- h. Vegetable oil dilutes the lubricant oil and forms sludges on all parts of engine

The alternative diesel fuels must be technically and environmentally acceptable, and economically competitive. From the viewpoint of these requirements, triglycerides (vegetable oils/animal fats) and their derivatives may be considered as viable alternatives for diesel fuels. The problems with substituting triglycerides for diesel fuels are mostly associated with their high viscosity, low volatility and polyunsaturated character. The problems have been mitigated by developing vegetable oil derivatives that approximate the properties and performance and make them compatible with the hydrocarbon-based diesel fuels through the pyrolysis, micro emulsification, dilution and Transesterification.

Some of the bio-diesel produced in the lab are soya oil bio diesel & karanj oil bio diesel.

Researchers in various countries carried out many experimental works using vegetable oils as engine fuel substitutes. These results showed that thermal efficiency was comparable to that of diesel with small amounts of power loss while using vegetable oils. The particulate emissions of vegetable oils are higher than that of diesel fuel with a reduction in NO<sub>x</sub>. Vegetable oil methyl esters gave performance and emission characteristics comparable to that of diesel. Hence, they may be considered as diesel fuel substitutes. Raw vegetable oil can be used as fuel in engines with some minor modifications. The use of vegetable oils as engine fuels can play a vital role in helping the developed world to reduce the environmental impact of fossil fuels.

*Dr K K Gupta*  
*Dean Mechanical*

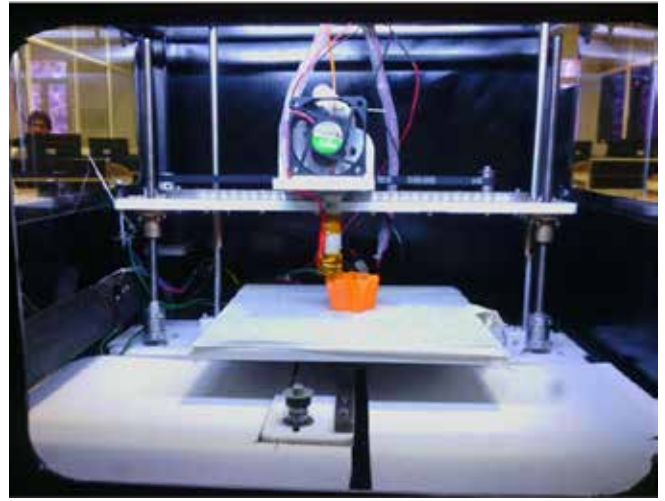
# Campus Buzz

## 1. 3D Printer

Mr. Amit Malu, Mr. Deep Sharma and Mr. Puneet Soni of 4th Year Mechanical Engineering Students have indigenously developed 3D Printer which can print object of overall size of 200 mm<sup>3</sup> with a precision of 2 microns. Input to the Printer is a CAD/CAM design file such as Pro-E or Catia which gets converted into the machine language by Cura software and then fed to the controller for printing. Material used by the machine is PLA or ABS Plastic. Students are researching to use Gold and Silver as the feed stock.

The team has taken one year to develop the printer at a cost of Rs. 1,00,000/-. However, they are confident of commercializing it at a much lower cost to make it one of the cheapest 3D Printer in the Market.

*Kudos to the team and best wishes for future innovations.*



## 2. Basics of aero-modelling discussed at IIST Workshop:

Aero-modelling club of IIST Indore organised a workshop on basics of aero-modelling in collaboration with sky flyers, Indore. Students got hands-on experience for flying the motorized aircraft model, focusing on technical aspects, the main goal of workshop was to provide theoretical and practical knowledge related to flying of unmanned motorized aircraft. "The basic purpose of providing such training to the students motivates them to make them aware about how to fly aircraft and inspire them to pursue the career of a pilot," said Kamlesh Suryavnashi, an expert from sky flyers, at the end of workshop, certificates were handed over to participants.



## 3. Indore Institute of Science and Technology, Indore organized principle meet regarding E-Yantra .

The Seminar began with the floral welcome of the chief guest Dr Krishna Lala by the director Shail Group of Institution, Dr Joy Banergy. Dr Krishna Lala is currently working as a senior project manager in the department of Computer Science Engineering, IIT Bombay. She has also worked with some of the leading institutions in the world like Harvard Medical School etc. She explained about the eYantra platform, its need and advantage to modern era and proceedings followed to





start and eYANTRA program called eLSI (eYANTRA Lab Set up Initiatives). In eLSI program the eYANTRA technocrats will train four faculties of the each participating institute. After completion of training eYANTRA engineers will setup the Lab in Institute premises and also give two ROBOT tools to the institute. The eYANTRA seminar was attended by more than 20 Principals/Representatives of Engineering Colleges of Indore and all of them were benefited by getting knowledge about “eYantra”. Dr Lala met all the representatives and answered their queries for the lab set up initiatives. She also said that in Madhya Pradesh, IIST Indore will be the Nodal centre for the eYANTRA program to communicate and train all the participating institute.

#### **4. IIST students excel in propeller display contest**



Indore students won a special prize at the national level propeller display competition hosted by IIT(K), students of IIST participated in the challenge and were rewarded for their work, IIST was the only college from the state to get selected for the competition, they competed with 111 other colleges from .....

#### **5. Youngsters learn about intellectual property**



Aiming to educate aspiring entrepreneurs on intellectual property confederation of Indian industry western region organized an interactive session for the students of IIST on Monday. Intellectual property facilitation centre, CII head Anil Pandey said, in order to build and adopt a strong IP driven ecosystem in India. It is necessary to have a collaborative and continuous effort by govt., corporate, institute and domain experts. Prodyuidhi managing director Pradeep said, “Intellectual property is a term referring to creation of intellect for which a monopoly is assigned to designated owners by law. Copyright, patents and industrial design rights protects trademark, trade dress and in some jurisdictions trade secrets.

#### **6. IIST recognised as Pride of Indore in Baja 2016**



Yet another feather in the cap for the students of IIST as Team Vijayrath bags the prestigious pride “Pride of Indore” trophy in Baja 2016. Designed and fabricated by the students of the team the car is an ATV- All Terrain Vehicle. The buggy featured in the event conducted by SAE from 17th – 21th Feb 2016 and has been fabricated under the benchmarks set by the SAE India. The car is powered by 305cc, 10 hp Briggs and Stratton engine. The vehicle was awarded as the best car in the city and won a trophy besides a cash prize.



## **7. A one day Seminar on Career Opportunities in IT Sector was organized. This was addressed by Mr. Pankaj Jain, Principal Consultant, Infosys, Bangalore on April 17, 2015 in the central auditorium.**

Mr. Jain highlighted the importance of Information Technology in all engineering and management applications and discussed various existing and upcoming avenues in Information Technology where lots of opportunities exist for students to build career. He motivated the students about many challenging areas like Information security, Infrastructure building, cloud computing, Agile and Big Data Analytics. He also shared his immense work experiences in diversified areas to help them plan their future pathway. The seminar was attended by around 150 students from IT and CS branch and senior faculty members and praised by everyone. Dr. Joy Banerjee, Director IIST also shared his experiences in this context. Dr. Ashish Bansal, Dean Information Technology, revealed the relevance of this talk with the advent of development of super corridor opening lot of opportunities with various incoming corporate like Infosys and TCS etc.



## **8. Seminar on Cyber Awareness by Varun Kapoor**

IIST is actively engaged in Learning for Cyber Security, online Protection of Child, Safe Internet usages, providing skills and training in cyber security, network protection, ethical hacking, cyber security and so on. And to make students aware of cyber crime IIST organized a seminar on Cyber Awareness in which the IG Mr Varun Kapoor, Director, Police Radio Training School said, "We are living in two kinds of world, one is real and the other is virtual. Student life is our real world in which we can meet our friends and well-wishers and share our pleasure and sorrow but the world available on social sight is imaginary in which we can see neither anybody nor share our





life. Even than we are indulge in it and get involved in cyber crime.” Then he explained the students how they could be a part of the cyber crime unknowingly, either as a victim of a perpetrator, and how they can protect themselves.

He also informed about the working of police in cyber crimes by stating some examples. Dr.Joy Banerjee, Director, IIST in his welcome speech made students alert about being careful while using social networking sites. The vote of thanks was given by Dr.Rajeev Vishwakarma. He said that in future college will take some initiative to collaborate with PRTS to further train the students.



## 9. Shail Foundation Day

Shail Foundation Day falls on 20th November. In the past we have been celebrating the Day with lots of fanfare while the faculty and staff gets a platform to show case their talent in various form of arts. However this time it was a somber ceremony due to sad demise of our Founder Mentor Shri. J. K. Jain who left us for the heavenly abode on 11 October 2015.

All faculty and staff assembled in the spacious central auditorium at 3.00 pm on 20th November 2015. The program started by observing two minute silence as a tribute to our Founder Mentor. Dr. Swati Singh and Prof. Nikita Sitlani then beautifully rendered two bhajans which deepened the solemn atmosphere of the jam packed auditorium:



“Allah Tero Naam, Ishwar Tero Naam”  
“Itni Shakti Hame De Na Data, Maan Ka Vishwas Kamjoor Ho Na”

Prof. Margi Patel briefly traced the history of Shail Group of Institutions and then took the assembled faculty and staff on a short tour of the Shail Group of Institutions.



Brig G P Chatopadhyay fondly remembered his association with Late. Shri. J. K. Jain and spoke of the brilliance of the Founder Mentor, his entrepreneurial spirit and witty disposition. He read out brief life sketch of the beloved Founder Mentor.

Shail Foundation Day 2015 celebration ended with a prayer that the departed soul of Late Shri. J. K. Jain rest in peace. May the sweet memory of the inspired life of Late. Shri. J. K. Jain continue to inspire and guide us.



## 10. Shail Trophy

With its focus on holistic development and acknowledgement of importance of sports, SGI conduct an Inter School Shail Trophy Tournaments for Football and Basketball. The matches held at IIST Campus bring together some exceptional talent in the field of football and basketball.

The Opening Ceremony was held on November 10, 2014 (Monday) at the Football ground of Indore Institute of Science and Technology. The event was graced by the presence of eminent guests like Mr Pemba Tamang from the Indian Army who has won a Silver Medal in the Asian Games 2014 as well as many Gold Medals during Common Wealth Games of 2005, 2006 and and Dr Ajay Kumar Sahani, Director of Sports (DAVV) Indore who was awarded a Gold Medal and received fellowship in M.Phil by Govt. of India, Ph.D from LNCPE Gwalior and has published 16 articles in national and international journals.

Basketball (Girls)	
Teams	Winner (Score)
St Arnald vs NDPS	St. Arnald (31 - 04)
Brite School vs. Colonel's Academy, Mhow	Brite School (20 - 09)
Basketball (Boys)	
Emerald Heights vs. Brite School	Emeral Heights (41 - 18)
St. Paul vs. JVN School, Manpur	St. Pauls (31 - 08)
Colonel's Academy vs Choitram	Colonel's Academy, Mhow
St. Arnald vs NDPS	St. Arnald (25 - 09)
Football (Boys)	
Advance Academy Vs. St. Arnals	Advance Academy (4 - 0)
St. Paul VS Madhav Vidyapeeth	St. Paul (3 - 0)
Choitram IB vs Spring Valley	Choitram IB (4 - 0)
Rajeshwar CBSE, Mhow vs Kesar Vidya Niketan	Rajeshwar, Mhow (4 - 0)



## 11. A national workshop “Breakthrough Energy Technologies & Challenges for Sustainable Development”

was organized on 29-30 October 2015. The aim of this workshop was to generate awareness of futuristic approaches of energy resources. Energy being indispensable for industrial and commercial wealth generation is the only means to an end. The end is a sustainable economy and a clean environment. The perspective of workshop was to train faculties and students which will be helpful in inspiring young minds in the field of energy and sustainability.

## 12. Mr Gaurav Gupta from Intel Corporation taking seminar about “Internet Of Things” @ IIST



“Internet of things” (IOT) is an innovative concept is being taken up to bring a revolutionary change in our lifestyles connecting us for several facilities. IIST organized a Conference with INTEL CORPORATION for the benefit and awareness of IIST students “Internet of Things”, is very latest and ambitious project jointly undertaken by many Corporate giants like IBM, GOOGLE, INTEL etc.



Internet of Things (IOT) is an innovation by which human beings, objects and even animals are provided with unique identifiers with the ability to transfer data over network without requiring human-to-computer or human -to-human interactions. IOT devices will be used to monitor and control Mechanical, Electrical, and Electronic systems, used in various types of buildings for controlling Lighting, heating, Air-Conditioning, Ventilation, home security devices, Communication Systems to improve convenience, comfort, energy efficiency and security without human interactions. User friendly devises will enable Gas gadgets, locking systems etc. to communicate and take actions



# Indore Institute of Pharmacy

## - An update

### Achiever of the Year

Prahalad Singh Rathore, student of B. Pharm IV year represented the Institute at state level Pomel Horse tournament on 25/10/2015 and secured 1st position. He also secured 11nd position in state level vault tournament on 25/10/2015. He also won gold medal at state level Gymnestic tournament on 14/09/14.

### A Seminar on Pharmacy Education Abroad on 3rd march 2016

Indore Institute of Pharmacy organized a seminar on Pharmacy Education Abroad with the purpose to make pharmacy students aware of scope of pharmacy profession in developed countries like US, Canada etc. and how to pursue MS and PhD and subsequent jobs in developed countries. Since developed countries have much more advanced research and development facilities and have highly paid job profile , this makes a lucrative career option for students to study abroad. The guest speaker was Mr Fernandes from White Glow education.

### Seminar on Mid Brain Activation on 09/12/2015

A lecture on mid brain activation was delivered by Mr. Vishal Agrawal from Brain Excel Institute for the students of B. Pharm. I sem. The seminar was highly enriching for the students as it gave them a way out to enhance memory, concentration, creativity and confidence.

### You Should Be Job Givers Not Job Seekers: A workshop on Entrepreneurship by MSME on 19/11/2015

A one day MSME (Mico Small and Medium Enterprise) workshop was organized by Indore Institute of Pharmacy on 19/11/2015 at Rau campus. Mr. Nilesh Trivedi, Assistant Director, Mico Small and Medium Enterprise Development Institute (MSME-DI), Indore , briefed about various government schemes such as Chief minister self employment project, Entrepreneurship development programme and Chief Minister



Young Entrepreneurship Scheme. He motivated the students about various self employment projects. With an aim to promote the entrepreneurs he apprised the students about the loan facilities offered in concordance with Mico Small and Medium Enterprise Development Institute (MSME-DI).

## Guest Lecture by Dr. Praful Bharadia

Dr. Praful Bharadia, Principal, Indore Institute of Pharmacy delivered a lecture at Department of Pharmaceutics of Shree S.K. Patel College of Pharmaceutics Education and Research on “Parenteral Implants” as a key note speaker on 10th August, 2015. He shared his knowledge and experience in the field of sterile dosage form and development with special emphasize on Implants. He also has shared many key points related to industrial development and application of Parenteral Implants.



## Motivational Seminar

“Don’t let the struggle break you. Instead, be the one to break it so it can show you the blessing behind.” In a motivational seminar, students were blessed to hear some outstanding motivational thoughts about life by Dr. Vikrant Singh. He is a young acknowledged Trainer, academician, scholar, writer and a management consultant. Worked as a National Training Resource of ICFAI University, Hyderabad. He is a qualified trainee member and a National Merit Award holder of the prestigious Indian Society of Training & Development, New Delhi, recognized by MHRD, GOI.



## Teacher's Day Celebrations

A cultural programme was organized by the students of B. Pharm on an occasion of Teacher's day on 4/ Sep/2015. Various cultural activities were performed by the students. It was a memorable event.



## 1. Gurukul

Gurukul was conducted by IIMR on 26th -27th August, 2015. Gurukul was a two days one night residential management exercise for MBA I sem students aimed at generating general awareness about economy and industry. The aim was to have an understanding of business environment, economy and practices. Series of activities took place for 2 days right from yoga, meditation, Art of living. Seminar on basics of Govt policy like monetary, fiscal, LPG, Reforms, Budget was taken by eminent speakers from industry and academia like

Dr. Mohammad from All India Association of Management Institutions, Mr. Naveer Khandelwal, Secretary Indore Management Association, Dr. Shefali Tiwari, Professor, Gujrati Institute of Management Studies, Mr. Shivendra Pancholi, DGM India Bulls, Mr. Amit Shrivastava, Head Digital marketing Diaspar, Mr. A.S.Joshi, Retd. Manager Bank of India.

The program was full of thrills as well. Students saw a film show, participated in camp fire. Students also participated in the sector specific seminars of banking, finance and insurance and pharmaceutical.



## 2. Alumni Meet Cum Farewell

To take a walk down the corridors of nostalgia, the Alumni Meet cum Farewell of 2015 match MBA students of IIMR was inaugurated jointly by the Head – HR Wockhardt Ltd. Mr. Mukesh Vyas and Principal, IIMR Dr. Mayank Saxena, on the beautiful evening of 19th Sept 2015. The meet cum farewell started traditionally with the lighting of lamp by the chief guest of the evening and was followed by the recital song Saraswati Vandana. The occasion was graced by more than 50 Alumni ranging across various batches from various parts of the country and the 2015 passing out Batch MBA Students. Speaking on the occasion, the Principal underlined and praised the achievements of IIMR Alumni in all walks/spheres of life. He felt that it was matter of great pride for IIMR that its Alumni are holding positions of responsibility in various organizations which include PSUs, Private sector and Academic Institutions. Many of them are successful entrepreneurs providing jobs to others as well. He praised their contribution towards the growth of their Alma Mater and emphasized the need for further strengthening the linkage between the Alumni and current students.

The Inaugural session was also addressed by HOD-

Dr. Rajendra Singh, faculty and staff members of IIMR.

Dr. Dheeraj Nim highlighted the achievements of IIMR and called for greater Alumni Participation. Alumni and the passing out batch students also shared their experiences with the current students.

The Inaugural session was followed by cultural program by juniors, the current students, presenting the traditional dances mixed with some more current dance forms. Great bonhomie was observed everywhere with old students reliving their old memories with their batch mates, seniors and juniors. Many of the current batch students were also seen interacting with their passing out seniors and alumni and learning from their experiences. In all, the ambience was electric with people seen chatting and dancing in groups. The Meet ended with promise to meet again and everyone bid emotional farewell to each other and their beloved institute.

## 3. Workshops:

Workshops on Personality Development were conducted by IIMR round the year to groom the students and help them make a mark of his/her own. Workshop on Personal Grooming and Body Language was conducted by Dr. Sujata Bansal on 4th August, 2015 where she helped students to find their business edge by ensuring that their body language communication is always in sync with the message they are trying to convey. Workshop on Motivation was conducted on 18th August, 2015 by Mr. Vikrant Singh Tomar, Group Director of Prashanti Group of Institutions. The aim of this workshop was to develop a more positive outlook of confidence and self-esteem and to improve their motivation to set clear, challenging yet achievable personal goals. The workshop was well received by the students. Workshop on Meet and Greet Professionals was conducted on 25th Aug, 2015 by

Mr. Shashank Agrawal, CEO Worth Corporate Solutions Pvt. Ltd. The aim of this workshop is to bring our students in connect with the corporate life and culture. The students depicted their curiosity towards corporate etiquettes which

was properly handled by the speaker. IIMR also organized a workshop on Entrepreneurship, digital marketing and soft skills on 27th April, 2015. The workshop was organized in association with IIM Kolkata and Makeintern. The objective of the workshop was to enhance knowledge of the participants regarding digital marketing and variants of it.



#### 4. Industry Visits:

During the year industrial visits were organized by IIMR. Industrial visits to Steller and Choupal Sagar was conducted to make students understand the difference in two kinds of settings in retail industry. Industry Visit to Mahindra Two Wheelers Pvt. Ltd. was conducted to make them aware about the working in a manufacturing organization.

And an industrial visit to Case Construction was conducted to develop an understanding towards the supply chain management and materials management and to see the practical applicability of various concepts.



#### 5. FDPs

i) Indore institute of management and research in collaboration with Academic Staff College, DAVV jointly organized the six days Faculty development program on the topic of “Nuances of Pedagogy for Effective Teaching” from 23.3.2015 to 28.3.2015. Professor and Asst. professor from various colleges participated in the program. Eminent professors like Dr. Abel Hernandez from Venezuela inaugurated the program spoke about the Spiritual learning and Humanities. He also talked about how the positive energy to be gathered before starting a new day. Professor Dr. S. S. Prasada Rao Dean & Director, Hyderabad Business School GITAM University, Hyderabad talks about Effective communication



for teachers, and how can student and teacher interaction become the tool for the effecting teaching. Dr. J. REEVES WESLEY, Dean VIT, Chennai provide the valuable insights on Projects as teaching tool and case method effective teaching. Other eminent professor also shared their view on the various topic related to the FDP. Finally on 28th March Dr. B. Gupta chaired the valedictory program and Dr. Ravindra Yadav offered the vote of thanks. Master of ceremony was Dr. Sanjeev Singhal.



ii) Faculty Development Program on “Advance Modeling and Data Analysis Tech for Research in Social Sciences” was organized by IIMR in collaboration with Human Resource Development Centre, Devi Ahilya University, Indore, From 30th Nov to 5th Dec 2015. The objective of the FDP was to develop research capabilities among young faculty and researchers for state of art data analysis techniques. Enhance skills to prepare an appropriate & state of art research design, including formulating research questions and hypotheses, collection of information and analysis. And to offer hands on experience on using SPSS, AMOS and Eviews.

The FDP was inaugurated by Dr. Ashutosh Mishra, Vice Chancellor, DAV. The technical session were addressed by the stalwarts of academia like Dr. H.P. Mathur, Dean BHU; Dr. J. REEVES WESLEY, Dean VIT, Chennai; Dr. Shakti Banerjee, Prof and Head School of Commerce, DAVV; Dr. Rajendra Singh, Head School of Commerce; Dr. Ravindra Yadav, IIPS, DAVV, Dr. P.K. Gupta, Prof, Jayant Sonwalkar, Dean Faculty of Management, DAVV.



## 6. Sports Tournaments:

Indore Institute of Management and Research has made significant contribution in the development of Games and Sports in Indore by organizing three mega sports events in the month of January 2016. The details of the events are as follows:

a. Divisional Level Volleyball (Women) Tournament: The divisional level volleyball (Women) tournament was organized on 13 – 14 January 2016. Eight teams from different colleges were participated in the tournament. The tournament was inaugurated by Dr. Ajay Kumar Sahani, Director of Physical Education, DAVV, Indore. The preliminary matches were played amongst various teams participating in this event from various institutes of Indore division and affiliated to DAVV. The final match was played between MRSC and Holkar Science Collage in which Maharaja Ranjit Singh College won the tournament. Selection trials were also held on the same day for university team which will be participating in university level tournament to be held at Amravati form 19 to 21 Jan 2016.



b. State Level Volleyball (Women) Tournament: State Level Volleyball (Women) Tournament was organized on 30 – 31 January 2016. Eight teams from divisions of Madhya Pradesh State were participated in the tournament. The final match was played between Indore and Jabalpur teams in which Indore team has won the tournament. The prizes were distributed by Dr. Ajay Kumar Sahani, Director of Physical Education, DAVV, Indore and Dr. Mayank Saxena, Principal of Indore Institute of Management and Research, Indore.

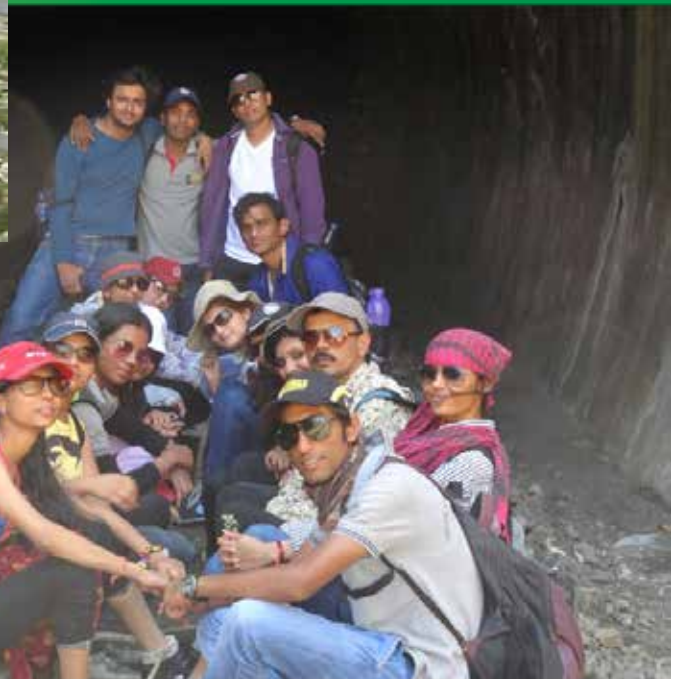


c. West Zone and National Inter University Tennis (Men) Tournament: West Zone and National Inter University Tennis (Men) Tournament was organized by Devi Ahilya University, Indore in collaboration with Indore Institute of Management and Research, Indore. The tournament was inaugurated by Dr. Ashutosh Mishra, Honourable Vice Chancellor of DAVV, Indore. The West zone matches were played from 25th Jan 2016 to 1st Feb 2016 and National level matches were played from 2nd Feb to 5th Feb 2016. In this tournament approximately 400 players from 43 teams of west zone and 12 teams of other zones were participated. Preliminary matches were played in IIMR tennis courts and final matches were played at ITC, Indore. IIMR has also provided lodging and transport facilities to players and managers of various teams.



## 7. Trekking from Kalakund to Patalpani:

A trekking was organized by IIMR from kalakund to patalpani for MBA II Sen students on 31st March, 2015 as a part of team building exercise. Students reached Kalakund via train from where the trek started. Students walked through the railway track and covered a distance of more than 10 Kms to reach Patalpani. Students enjoyed playing several management games.



## MY 2 TO 20 YEARS FRIEND: TREE PLANTATION

The event club of IIMR had organized a tree plantation drive on 1st October 2015 with the objective of creating long term bonding between the students, institute and environment. During the drive, students planted trees in SGI campus. The Students pledged to take care of the plantations during their two years academic tenure.



## GANESH UTSAV

IIMR celebrated Ganesh Chaturthi Utsav from 17th September to 26th September 2015 with the objective of developing strength and unity in the campus and to create the vibes of good fortune and prosperity.



## FRESHERS PARTY

Continuing with the proud tradition of IIMR, senior students and newcomers of the college mingled with each other at the freshers' welcome party held on 5th December 2015. It was a fun filled event at which the fresher's got an opportunity not only to showcase their talents and but also to interact with the seniors. Soon after the inauguration, the programs kick-started with a ramp walk in which the students vied for Mr. and Ms. Fresher 2015, Mr. and Ms. Eve 2015, and Best couple title.

The contest included several rounds involving singing, dancing, talent display, dress parade and the like, which wove the magic of fun and joy in to the event.

At the end of the very enjoyable competition, Ms. Neha Kale was crowned as "Miss Fresher 2015".

Mr. Himanshu Agrawal as "Mr. Fresher 2015", Ms. Nidhi Barche as "Ms. Eve 2015", Mr. Aman Jain as "Mr. Eve 2015" and Ms. Shubhangini Jaiswal and Mr. Gaurav patel as "Best Couple".

After the competitions, it was for the freshers and seniors to rock the fresher party with dancing and grooving. Finally the program ended, leaving behind sweet memories that will be cherished lifelong.

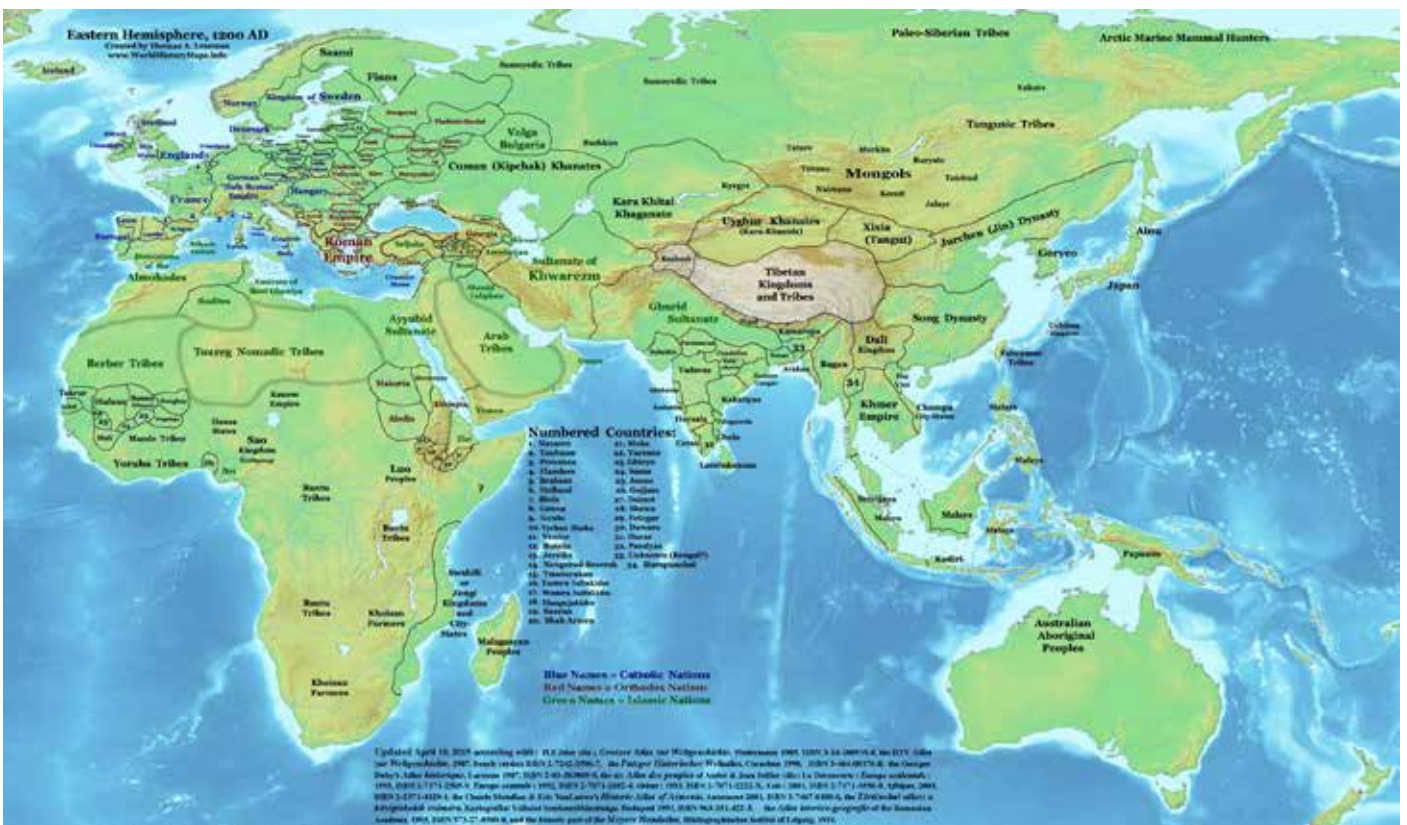


# A GLIMPSE ON MALWA REGION

**Malwa**, a word originated from the Malav, like that of the Malaya mountain range is probably derived from the Dravidian word “malai” meaning the hill. It is an ancient janpad of India. In ancient times Avantika or Avanti or present day Ujjain was the capital of this janpad. The region has gained a lot of fame during the reigns of Ashoka, Parmar dynasty, Mughals and Vikramaditya and followed by Marathas.

Malwa is a natural region in west-central India occupying a plateau of volcanic origin. Geologically, the Malwa Plateau generally refers to the volcanic upland north of the Vindhya Range. Politically and administratively, the historical Malwa region includes districts of western Madhya Pradesh and parts of south-eastern Rajasthan. The definition of Malwa is sometimes extended to include the Nimar region north of the Vindhyas.

Malwa being an ancient janpad of India has a rich Cultural heritage. In this region there existed a large number of monuments of Ancient, medieval and modern times. The Bagh caves in Dhar district, the Sanchi stupas, the two Jyotirlingas of Onkareshwar and Mahakaal of Ujjain, the city of Dhar, the splendid city of Mandu, the beautiful city of Maheshwar tells us the rich heritage of Malwa.

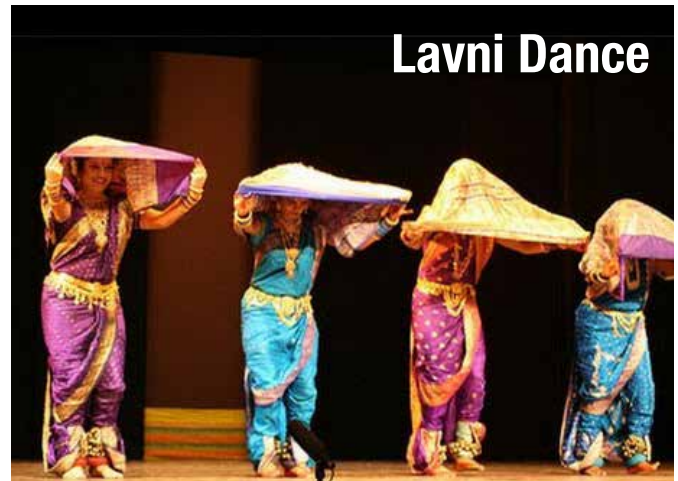


## Position of Malwa with respect to other states in bc. 1200 prior to conquest by Delhi Sultanate

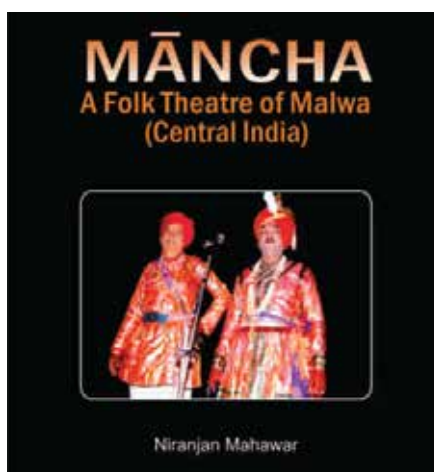
Although its political borders have fluctuated throughout history, the region has developed its own distinct culture, influenced by the Rajasthani, Marathi and Gujarati cultures. Several prominent people in the history of India have hailed from Malwa, including the poet and dramatist Kalidasa, the author Bhartrihari, the mathematicians and astronomers Varahamihira and Brahmagupta, and the polymath king Bhoja.

## Malwa region has a number of performing arts.

1. Lavani is a widely practised form of folk music in southern Malwa, which was brought to the region by the Marathas. The Nirguni Lavani (philosophical) and the Shringari Lavani (erotic) are the two of the main genres.
2. The theatre tradition exists in several forms of Malwa. There is a dance drama form in Nimar which is called "Kathi".
3. Bhavai is a folk theatre form from Rajasthan and Gujarat which is followed and is an importance source of entertainment.



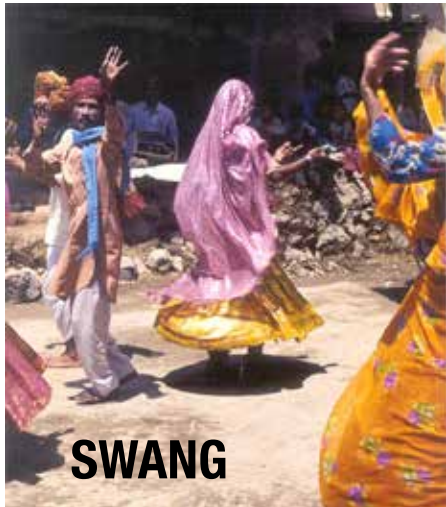
4. Other forms of performing arts are Swang Naqal, Gammat, Nautanki and Garbaa which have a strong tradition.
5. The folk theatre form which have their origin in Sangeet are called Nautanki in Uttar Pradesh, Swang in Haryana and Khayal in Rajashtan. The Khayal theatre went to Malwa from Rajasthan and got the name Mancha.



## Mancha

MANCHA is a popular folk theatre form of Malwa. It is so popular because of the prosperity of Malwa people, their enthusiasm, and sense of humour and liking of folk tradition. Ujjain is the main centre of Mancha.

Swang is a popular dance form in Malwa; its roots go back to the origins of the Indian theatre tradition in the first millennium BC. Since women did not participate in the dance-drama form, men enacted their roles. Swang incorporates suitable theatrics and mimicry, accompanied alternately by song and dialogue. The genre is dialogue-oriented rather than movement-oriented.



Mandana (literally painting) wall and floor paintings are the best-known painting traditions of Malwa. White drawings stand out in contrast to the base material consisting of a mixture of red clay and cow dung. Peacocks, cats, lions, gojari, bawari, the swastika and chowk are some motifs of this style. Sanjhya is a ritual wall painting done by young girls during the annual period when Hindus remember and offer ritual oblation to their ancestors.

The rich cultural heritage of Malwa is due to the truth that this region is prosperous and thus provided patronage to the performing artists both from local and outsiders. Those performers who have come from other states and settled here have contributed in the enrichment of the culture of Malwa.



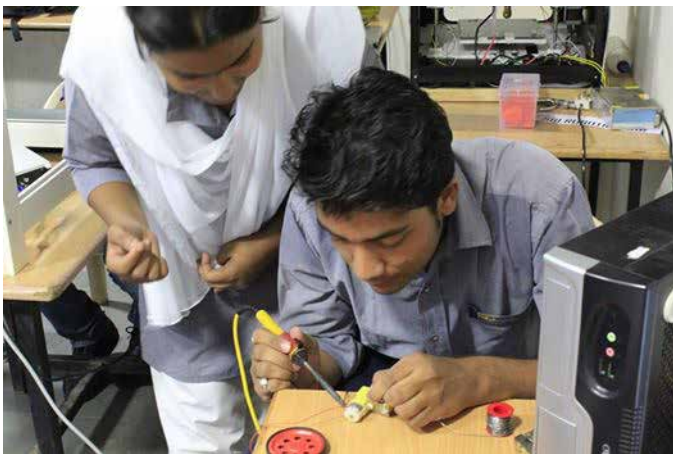
## Mandana

*Kriti Vishwakarma*



# ACADEMIC ACTIVITY



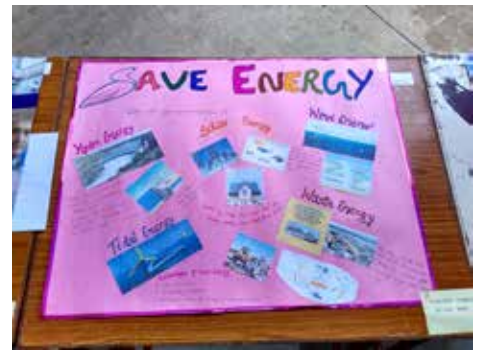




# ACADEMIC ACTIVITY



# IIST ALUMNI







# Extracurricular Activities



# CHEMICAL



# COMPUTER SCIENCE



# ELECTRONIC & COMMUNICATION



# IIMR







# Mechanical Engineering

# Media Coverage

**IIST, IIT join hands to launch virtual lab**

**आईआईटी दिल्ली लैब में इंटीर हुआ कनेक्ट**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**IIST, BSNL ink pact for tech support to students**

**बीएसएनएल स्टूडेंट्स को देगा टैली कम्युनिकेशन ट्रेनिंग का ट्रेनिंग**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**...खत्म हो रही है वलास रूम की सीमाएं**

**ब्रॉडवॉय नहीं, टीचिंग मेथडोलॉजी के बेसिस पर चुनो कॉलेज**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**आदित्य ने आफने दल के साथ हिमालय में खोजी अनाम चोटी**

इंदौर। आईआईटी कॉलेज के फर्स्ट ईयर इंजिनियरिंग के स्टूडेंट आदित्य कुलकर्णी ने पर्यटकों को सुरक्षा के कवच के रूप में नई चोटी खोजने के लिए हिमालय में नई चोटी खोजने के लिए 45 पर्यटकों के साथ गोरखनाथ गढ़ करने की आठ दिन की ट्रेकिंग के बाद पर्वतारोहियों का दल समीप वाले समुद्र तल से 5800 फीट उंचा गुर्नाल कोल पैक राईन और आठ दिन की पहाड़ों के बाद समुद्र तल से 6059 फीट ऊंचाई पर स्थित चोटी पर लौटा फहराया।

**ब्रॉडवॉय नहीं, टीचिंग मेथडोलॉजी के बेसिस पर चुनो कॉलेज**

**अब पंडाइट एप से भी हो सकेंगे जेडईई काउंसलिंग में शामिल**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**नो को तस ज़िंदा है है नाइबर काइम टैली**

**जानकारी के अभाव में बन सकते सायबर क्राइम के शिकार- कपूर**

...खत्म हो रही है

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...खत्म हो रही है

**अब बार-बार नहीं करना पड़ेगा लॉम-इन**

**फैब्रिकी को मिली लेटेस्ट सॉफ्टवेयर की जानकारी**

...खत्म हो रही है

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...खत्म हो रही है

**स्टूडेंट्स ने बनाया 3D प्रिंटर**

**पत्रिका**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**मिनी न्यूज**

**स्टूडेंट्स ने समझे एअरो मॉडलिंग के बेसिक**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**स्टूडेंट्स ने जीन एडिक्शन रीजिंग के मु**

**इंजीनियरिंग सिस्तेमिटी रुट रीजिंग में जीन के बेहतर अंजन**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है

**शहर के युवा पर्वतारोही आदित्य कुलकर्णी ने ताखेल खीती ग्लेशियर में खोजी चोटी से टंकर नई चोटी**

**डटे रहने का सबक इन पर्वतों से बेहतर कौन देगा**

**डेडी टु ईट फूड ज़रूरी है**

...खत्म हो रही है

...खत्म हो रही है

...खत्म हो रही है





Manali Sethi\_CSE\_IYr



# Paras Jain Chemical Engineering

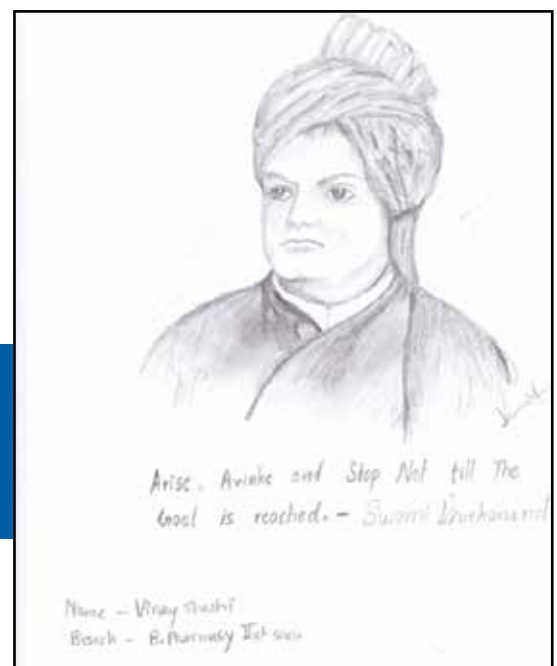


SatyanshuVerma\_CSE\_IVYr



Shubham Goyal\_EC

Vinay Shastri B.Pharmacy  
2nd sem. 1st year





# Collage Ganesha

*Kriti Vishwakarma*



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