



# THE ACRO CHRONICLE

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## My Credentials



At the cross-roads of life, where everything seems to be glittering and promising, with many options open, a decision can change your life.

All of us are very much concerned for our career and a secure future ahead. Even we as acropolis family were quite apprehensive about our decision till we knew its credentials. AITR was established in 2005 and within a short span of time, the institute has become a synonym of excellence in creating a strong base of the intended engineers. It is spread over a large land area, with lush greenery, away from the hustle and bustle of the city yet very approachable due to good transportation facility connecting it with every corner of the city. The institute boasts of excellence in architectural structure, unique of its own, with large spacious and airy classrooms. The ambience of the institute is very positive and the air has a sense of discipline, with smart, industrious and hardworking students in their shiny and tidy uniforms, who have proved their credibility by their ever-improving results. This all has been done and achieved under the able guidance and kind supervision of the faculty members, administrators and the management members, who have been supportive all throughout and have wished for the betterment of the students.

Ms. Druvika Raj, IT – II yr

## From the desk of the Editor



This quarterly newsletter, The Acro Chronicle, is specially designed to disseminate the scholarly knowledge of the Acro-members along with the campus news. Realizing the lacunae in the professional development of the institutions today, we have launched this newsletter to bridge the gap between the institute and the industries, other educational institutes and the society at large.

“*Great Legend*” includes the biographies of eminent personalities along with their messages. “*Curtain Raiser*” provides the information about up-coming companies, their status, profit, sales, placements, awards etc. “*Tech. Erupt*” talks about the technical updates, current and future advancements in technology at local and global level. “*Acro Notch*” provides the information about the achievements of the faculty and the students. The volume contains various columns to cater the needs of every reader. “*Do you know*” informs the reader about general haps around us. “*Fun Zone*” entertains and is intended to lighten the mood of the readers. However the contents of this newsletter are never static; they are likely to change with change in frontiers of knowledge, so that the readers are kept abreast of thought and progress of the institute and the nation at large.

Dr. Anita Thakur

## Development through Education



Education has continued to evolve in diverse fields since the dawn of human civilization. Undeniably every nation has placed boundless trust in the educational system despite of several setbacks, hence the society has every right to expect concrete results. The pace of revolution in the present decade seems to be accelerating all over the world making the targets further complex and challenging. However the highway to the development of any nation is through education and if we compromise with the quality of education at any level we are bound to jeopardize the socio economic development of the nation.

Hence, visualizing the needs of the present education system we at acropolis are fully committed in shaping and chiseling the formative young years of the students by imparting value based education under the umbrella of engineering wisdom.

**Shri Ashish Sojatia**  
**Chairman**

## Education vs. Employment



There has been a phenomenal increase in the number of technical institutes in the last few years resulting in a condition of unplanned proliferation and inappropriate professional training at many places. All this unfortunately leads to a great degree of frustration due to mismatch between education and employment, forcing the educationists and industrialists to involve in serious planning to match the supply with the demand.

To cope up with this situation, we at Acropolis provide industrial trainings and visits as essential components of the academics. The objective is to expose the students to the wider and practical world and instill into them the work culture needed in handling their ventures successfully. Fortunately, in the last couple of years, this scheme in AITR, has received overwhelming support from both students and industries resulting in quality education and better results. We thank all the concerned segments of the society for their cooperation and enthusiasm.

**Prof. M. K. Dube**  
**CEO**

## Education needs new approach



The new approach in education system is required to put traditional way of education process on back seat, where the focus is on course material, examination and degrees, whereas new approach is student focused. It has two components – organized and non-organized. Organized part consists of lectures, tutorials, workshops, group work, practical and field project work. The other component, non-organized part is to create an environment having culture of getting educated on your own. This is possible by free access of different resources like media, computer facilities, bookshelves, faculties and above all freedom to

make mistakes, but not at the cost of ethics, discipline and decorum. The outcome of above should be positive in the form of starting of thinking process among the students from reasoning and creativity point of view. If the students' thinking gets aligned with goals pertinent to society and country with respect to present time and futuristic point of view, the purpose of education is achieved.

**Dr. Anand Sapre**  
**Director-FMS**

### **Skill Based Education – An opportunity or a Threat?**



Education is a process of teaching, training and developing skills. The current education system seems to be dominating only single factor of education i.e. Skill. Every system now is emphasizing the skill based education. This has led the youth towards just use of various tools instead of understanding them and inventing new advanced technologies. Today the students are diverted at very basic age level, they are thrown into the market to work, who otherwise would have done wonders, if pursued proper quality higher

education.

No. of Software Development out sourcing, BPO, Call Centre etc. are successfully flourishing in our country and have generated desire in youth for making fast money at tender age. Thus we have converted a bulk of intelligent stuff into skilled labor. Moreover, this labor (Skilled) after earning hand some money within few years, wants to start their own business, they are not successful because of lack of profound knowledge to run an organization to which they are not exposed to.

This is the outcome of skill based education system which concentrates on practicing the already invented skills, instead of generating and inventing new ideas, and making the world follow it. We Indians are considered as biggest hub for IT industry, but the irony is, we do not have on to our credit any Operating system or RDBMS or any ERP which is dominating the world market. This indicates there is some lacuna in our existing system.

I agree that this skill based education system has blessed India financially, but in long term it may convert us into “*educated slaves*” of Developed Countries. Within a span of 25 to 30 years, if we count for prominent scientist, then the only name comes out is of APJ Abul Kalam and no one else and we still claim of best brains. Thus our skill based system has led us to “Trend followers” rather than “Trend setters.”

Thus I feel, this is high time to analyze, whether the skill based education is an opportunity or thereat. We should develop an education system which will create equilibrium between skill based practices and knowledge based education.

**Prof.D.M. Puntambekar**  
**HOD-MCA**

# NEWS OF THE CAMPUS



**Republic Day Celebration:** AITR celebrated this red letter day on 26<sup>th</sup> January, 2007. The flag was hoisted on the ramparts of the institute by the renowned orthopedic surgeon of Indore, Dr. S.N.Goel who was also the chief guest of the programme. Several speeches were delivered in reminiscence of all those national leaders who have contributed their mite for the nation. The chief guest addressed the staff and students and instilled into them the feeling of brotherhood and patriotism. He appreciated the institute's vision and its approach in achieving the national goals.



**Scholarships Awarded:** In connection with this republic day, scholarships were awarded to the meritorious students and the needy. Five students of II year, who stood first in their respective branches, in the RGPV semester exams were awarded Rs.8000/- as a token of appreciation. Ms.Swarna Biyani –CS, Ms. Dhruvika Raj-IT, Ms. Akansha Vyas and Mr.Rajiv Vijayvargiya-EC, Ms. Sonal Udawat-EI were the recipients of these merit based awards. In addition to this, equal amount was given to three other students to support them financially.

## Summer / Winter School Events Organized –Seminars / Guest Lectures



### Lecture on Raid Implementation:

Under the Summer School Events, AITR organized a seminar on “RAID implementation” on 21 April, 2007 for Staff and Students of MCA & BE. Mr. Amit Rawat, a resource person from EMC<sup>2</sup> Private Ltd., presented the seminar.

**Lecture on Forensic Sciences:** A lecture was organized by the experts of forensic sciences on “Application of Scientific principles for the Investigation of crime”. The students who are inquisitive and love adventures were benefited by the lecture.



### **Lecture on Job Prospects in Information Technology:**

To foster among students an understanding of the IT culture and to promote the rational outlook and scientific temper, a seminar was organized by the MCA department of AITR on 7 May, 2007 in the college premises for the staff and students of MCA and BE. An eminent IT professional Dr. N.K.Mehta has presented the seminar and focused on the present needs i.e. improving the functional efficiency and proper

upkeep of the computation facility. He attended the queries of the students and staff and extended some valuable suggestions for procuring placements in software field. Prof. D.M. Puntambekar, HOD- MCA Dept. and the Management Members were highly indebted to Dr. Mehta for imparting his valuable suggestions and skills to the institute.

### **Faculty Development Programme Organized:**



To stimulate the academic environment and to provide impetus to research, a faculty development programme was organized by AITR, on “Research Methodology”, on 17 March, 2007. In pursuant to the national policy on education, an eminent educationist, Dr. Manohar Chandwani, the director of IET, DAVV-Indore, has presented a lecture on the fast changing socio-educational system. Dr. Chandwani focused on all the academic objectives of the widely divergent disciplines and simultaneously emphasized research

oriented activities, to meet the perpetual emerging needs of the society. The Principal, Dr.M.D.Agarwal, Prof. D.K. Mishra and the management members were highly indebted to Dr.Chandwani for enlightening their faculty-members with the latest trends in research.

### **Faculty Development Programme Attended:**

Four faculty members of AITR, Mr. Suresh Batni, Dept of Mechanical Engg., Mr.G.K. Anand, Dept of Electronics, Mrs. Richa Tiwari Gupta, Dept. of Comp. Sc. and Dr. Prasanna Shah, Dept. of Applied Physics have attended the Faculty Development Programme organized by Chameli Devi Institute of Technology and Management, Indore, on 24 March 2007.

## Industrial Visits:

To cater the students with practical knowledge and industry experience, the CEO, Prof. M.K. Dube has organized the following Industrial visits to the near by industries of Indore



- The students of Computer Science – I yr. visited Indo-German Tool Room, Indore on 13 April, 2007. Here the students witnessed the training programmes related to CNC Technology and the working of the Production wing. The students were well received and guided by Mr. P.K. Sharma, DGM, IGTR. The students were also briefed about the short & long term courses run by the IGTR, Indore.

- The students of Information Technology – I yr. visited NCM –Shoava Engineers Pvt. Ltd. on 18 April, 2007. Here the students witnessed the products like Cruncher, Grapple, Hydraulic Rock Breaker, Vertical Shaft Impactor etc. The CEO, Mr. Neeraj Majumdar, was kind enough to brief the students about the organization and its working.

## Annual function – “Ardour’ 07”

AITR celebrated its 2<sup>nd</sup> Annual gathering and Sports meet on 30 March, 2007 in the college campus. In connection with this, the institute celebrated “Engineering Wisdom Week” in which several activities related to sports, literary and cultural were organized. **Inter-College Events Held:** The events comprised Inter-college Debate, Quiz and Volleyball in which around seven technical institutes of Indore have participated. The eminent expert cricket commentator, Shri. Sushil Doshi and many other elite personalities have paid their visits to the institute to inaugurate the various events of the programme.



The eye-opening views of the students in debate, their deep insight in quiz and the sportive vision in games and sports were highly appreciated by the guests of the various events. The winners and runners of all the activities were awarded prizes and certificates by the chief guest, **Hon. Shri. Vivek Agarwal, Collector, Indore division.** The chief guest addressed the students and motivated them to keep their pace on the track of the forerunners.

The mind blowing and heart throbbing dance performances of the students were the highlights of the cultural evening. To bless the occasion Shri. Ashok Sojatia, the patron of the institute, and Shri. Ashok Kumat, the Vice-Chairman of the institute were also present.



**Blood Donation Camp Organized:** As a service to the society and as a complement to this programme, AITR has also organized a blood donation camp in the institute on 29 March, 2007. The students and staff of the institute donated blood to the needy.

## THE GREAT LEGEND



Dr. Kalam, 11<sup>th</sup> President of India. Born on 15<sup>th</sup> October, 1931 in Tamil Nadu, specialized in Aeronautical Engineering from Madras Institute of Technology. Dr. Kalam made significant contribution as Project Director to develop India's first indigenous Satellite Launch Vehicle (SLV-III) which successfully injected the Rohini satellite in the near earth orbit in July 1980. He was responsible for the evolution of ISRO's launch vehicle programme, particularly the PSLV configuration. After working for two decades in ISRO and mastering launch vehicle technologies, Dr. Kalam took up the responsibility of developing Indigenous Guided Missiles at Defence Research and Development Organisation as the Chief Executive of Integrated Guided Missile Development Programme (IGMDP). He was responsible for the development and operationalization of AGNI and PRITHVI Missiles and for building indigenous capability in critical technologies through networking of multiple institutions. He was the Scientific Adviser to Defence Minister and Secretary, Department of Defence Research & Development

from July 1992 to December 1999. During this period he led to the weaponisation of strategic missile systems and the Pokhran-II nuclear tests in collaboration with Department of Atomic Energy, which made India a nuclear weapon State. As Chairman of Technology Information, Forecasting and Assessment Council (TIFAC) and as an eminent scientist, he led the country with the help of 500 experts to arrive at Technology Vision 2020 giving a road map for transforming India from the present developing status to a developed nation. Dr. Kalam has served as the Principal Scientific Advisor to the Government of India, in the rank of Cabinet Minister, from November 1999 to November 2001 and was responsible for evolving policies, strategies and missions for many development applications. Dr. Kalam was also the Chairman, Ex-officio, of the Scientific Advisory Committee to the Cabinet (SAC-C) and piloted India Millennium Mission 2020. Dr. Kalam took up academic pursuit as Professor, Technology & Societal Transformation at Anna University, Chennai from November 2001 and was involved in teaching and research, with the unique honour of receiving honorary doctorates from 30 universities and institutions. He has been awarded the coveted civilian awards - Padma Bhushan (1981) and Padma Vibhushan (1990) and the highest civilian award Bharat Ratna (1997). He is a recipient of several other awards and Fellow of many professional institutions. Dr. Kalam became the President of India on 25th July 2002. His focus is on transforming India into a developed nation by 2020. Dr. Kalam is one of the most distinguished scientists of India

### **Kalam's Speech.....a milestone for every Indian**

Following are the excerpts of Abdul Kalam's speech in Hyderabad, a must to read by every Indian. "From Alexander onwards, the Greeks, the Turks, the Moguls, the Portuguese, the British, the French, the Dutch, all of them came and looted us, took over what was ours. Yet we have not done this to any other nation". Perhaps we respect their freedom.

You say that our government is inefficient, You say that our laws are too old, you say that the municipality does not pick up the garbage, you say that the phones don't work, the railway are a joke, the airline is the worst in the world, mails never reach their destination. You say that our country has been fed to the dogs and is the absolute pits. You say, say and say. What do you do about it? Take a person on his way to Singapore. Give him a name – Yours. Give him a face-Yours. You walk out of the airport and you are at your International best. In Singapore you don't throw cigarette butts on the roads or eat in the stores. You pay \$5 (approx. Rs 60) extract to drive through Orchard Road between 5 pm to 8 pm. The fines are Rs.12,500/-for throwing cigarette buds or waste papers on streets, Rs.25000 for smoking in public places, Death in 3 month if you misbehave with a lady.

You comeback to the parking lot pinch your parking ticket if you have over stayed in a restaurant or a shopping mall irrespective of your status identity. In Singapore you don't say anything. Do You? You wouldn't dare to eat in public during Ramdan, in Dubai. You would not dare to go out without your head covered in Jeddah. You would not dare to buy an employee of the telephone exchange in London at 10 pounds (RS. 650) a month to, "see to it that my STD and ISD are billed to someone else". You would not

dare to speed beyond 90 kmph in Washington and then tell the traffic cop, “Jaanta hai main kaun hoon (Do you know who I am?). I am so and so’s son etc., etc.,.....Take your two bucks and get lost”. You wouldn’t chuck an empty coconut shell anywhere other than the garbage pail on the beaches in Australia and New Zealand. Why don’t you spit on the streets of Tokyo? Why don’t you use examination jockeys or buy fake certificate in Boston? India is my mother. It’s my Mother, My land, My style, My Passion, I’ll spit on my mother, My soil, My wish.

We are still talking of the same you. You who can respect and conform to a foreign system in other countries but cannot in your own. You who will throw papers and cigarette on the road the moment you touch Indian ground. If you can be an involved and appreciative citizen in an alien country why cannot you be the same here in India.

We go to the Polls to choose a government and after that forfeit all responsibility. We sit back wanting to be pampered and expect the Government to do everything for us whilst our contribution is totally negative. We expect the Government to clean up but we are not going to stop chucking garbage all over the place. When it comes to us actually making a positive contribution to the system we lock ourselves along with our families into a safe cocoon and look into the distance at countries far away and wait for a Mr. Clean to come along and work miracles for us, run to America to bask in their glory and praise their system. When New York becomes insecure we run to England. When England experience unemployment, we take the next flight out to the Gulf. When the Gulf is war struck, we demand to be rescued and brought home by the Indian Government. Everybody is out to abuse and seduce the country. Nobody thinks of correcting the system. Our conscience is mortgaged to money. “Ask what we can do for India and do what has to be done to make India what America and other western countries are today. Let’s do what India needs from us”.

**MESSAGE:** Ask not what your country can do for you, ask what you can do for your country?

**ACRO NOTCH**

#### **Papers Presented / Published by the Faculty:**

- ⇒ The paper entitled “*Extended protocol for Secure multi-party computation using ambiguous identity*” of **Prof. D.K. Mishra** has been published in International Journal “Wseas Transactions on Computer Research”, Issue2, Volume2, February 2007, Wseas Press, Greece, pp.227-233 .
- ⇒ The paper entitled “*Arithmetic Cryptographic Protocol for Secure Multi-party Computation*” of **Prof. D.K. Mishra** was accepted for presentation and publication in International Conference IEEE southeastern 2007, Richmond, Virginia , 22-25 Mar 2007.
- ⇒ The paper entitled “*Secure Multi-party Computation with data Concealing from Anomolymizer for Preserving Privacy during Data Mining*” of **Prof. D.K. Mishra** was published in the proceeding of IndiaCom2007, New Delhi, 23<sup>rd</sup> -24<sup>th</sup> Feb 2007 pp.515-518.
- ⇒ The paper entitled “*Defining Privacy for Data Mining*”, of **Prof. D.K. Mishra** was published in National Journal “Management Effigy Channel 21” by SVIM Indore.

- ⇒ The paper entitled “Secure Multiparty Computation using randomization in data mining”, was presented by **Prof. D.K. Mishra** in a national conference on “Current Trends in Technology NUCONE 06” , 30 Nov- 2 Dec, 2006, organized by Nirma University of Science and Technology, Ahmedabad.
- ⇒ The paper entitled “Techological Innovative Products”was presented by **Mr.S.Batni** in AICTE sponsored National Seminar on New paradigms in supply chain management, organized by Mahakal Institute of Management, Ujjain on 15<sup>th</sup> Dec. 2006.
- ⇒ The paper entitled “An Artificial Neural Network Approach for supply chain management”of **Mr.S.Batni &Mr. Pradeep Yadav**, Dept. of Mech. Engg., was presented in a AICTE sponsored National Seminar on New paradigms in supply chain management, organized by Mahakal Institute of Management, Ujjain on 15<sup>th</sup> Dec. 2006.
- ⇒ The paper entitled “Demand Forecasting using Artificial Neural Network Technique” was presented by **Mr.S.Batni & Mr.Pradeep Yadav**, Dept. of Mech. Engg., in a National Conference held at Institute of Technology, Borawah during 23-24 March, 2007 .
- ⇒ The Paper entitled “*Death consciousness in the poetry of Sylvia Plath*” was presented by **Dr.Anita Thakur**, Dept. of Humanities, in a National Seminar on “Cultural Identity and Literature: Globalisation and Specificity” held at Girls Degree College, Indore on 18 February 2007.The paper is published in a National Journal.
- ⇒ The paper entitled “*Clinical evaluation of the Female characters in The Wasteland : A study in thematic perspective*” was presented by **Dr. Anita Thakur**, Dept. of Humanities in a National Seminar on “The impact of Vedas on English Literature, at Govt. Girls College, Ratlam on 19 March,2007.
- ⇒ The paper entitled “*Environmental Impact Assessment of Industrial Effluent on underground and Surface Water Quality in Dewas Region*” was presented by **Mrs. Kashfina Kapdia**, Dept of Civil Engg. Mrs. Kapadia is a recipient of “Hindustan Dorr-Oliver Prize(III) for best Technical Paper presented, in the 39<sup>th</sup> Annual Convention of Indian Water Works Association in Mumbai, held between 1-3 February, 2007.
- ⇒ **Mrs. Kashfina Kapdia**, Dept of Civil Engg., participated in national conference on “Soft computing methodology” sponsored by Technical education quality improvement program (T.E.Q.I.P.), organized by Ujjain Engineering college, Ujjain on 19 - 20 March 2007 and presented technical paper entitled “ *Water quality modeling in water distribution network using EPANET 2.0 software.*”
- ⇒ **Mrs. Kashfina Kapdia**, Dept of Civil Engg., participated in 22<sup>nd</sup> M.P.Young Scientist congress organized by M.P council of Science and Technology and Samrat Ashok Technological Institute, Vidisha , 28 February-1 March 2007 and presented a technical paper.
- ⇒ **Mrs. Kashfina Kapdia**, Dept of Civil Engg., participated in National Conference on “ Meeting the Challenges of Tomorrow” CEMCT-06 organized by G.N.D.E.C. Ludiana, 24<sup>th</sup> -25<sup>th</sup> November 2006 and presented a paper titled “*Feasibility studies and cost benefit analysis of metal pickling industrial sludge in combination with Yellow and Black Cotton soil.*”
- ⇒ **Mrs. Kashfina Kapdia**, Dept of Civil Engg., participated in national conference on “Advance modeling Technique-07 ” organized by Jawaharlal Institute of technology, Borawan, 23<sup>rd</sup> -24<sup>th</sup> march 2007 and presented technical paper entitled “*Applications of Neural Networks.*”

- ⇒ **Mr. Pradeep Yadav**, Dept. of Mech. Engg., has participated and presented a paper entitled “ An ANN approach to Gas Turbine condition Monitoring” in International Conference on emerging mechanical Technology Macro to Nano (EMTM2N), held at Birla Institute of Technology & Science, Pilani, Rajasthan during 16-18 Feb, 2007.
- ⇒ **Ms. Zulfa Shaikh**, Dept. of Computer Science, attended one day workshop on “Deployment and use of web and video courses” supported by MHRD and organized by Indian Institute of Technology, Delhi on 30<sup>th</sup> March 2007 under National Programme on Technology Enhanced Learning Project.
- ⇒ **Ms. Zulfa Shaikh**, Dept. of Computer Science, participated in national conference on “Advance modeling Technique-07 ” organized by Jawaharlal Institute of technology, Borawah, 23-24 March, 2007 and presented the paper entitled “Applications of Neural Networks.”
- ⇒ **Ms. Zulfa Shaikh**, Dept. of Computer Science, participated in national conference on “Soft computing methodology” sponsored by Technical education quality improvement program (T.E.Q.I.P.) and organized by Ujjain Engineering College, Ujjain, 19th - 20<sup>th</sup> march 2007 and presented paper entitled “Neural Networks and knowledge based systems.”

### **Workshops Attended**

- ⇒ Mrs. Kashfina Kapdia, Dept of Civil Engg., attended two days conference/workshop on “Earthquake Resistant Construction and Disaster Management” on 12 & 13 January, 2007 in M.J.P.Govt Polytechnic, Khandwa.
- ⇒ Mrs. Kashfina Kapdia, Dept of Civil Engg., attended one day workshop on “Development and use of web and video courses” supported by MHRD and organized by Indian Institute of Technology, Delhi on 30<sup>th</sup> March 2007, at IIT Delhi, under National Programme on Technology Enhanced Learning Project.
- ⇒ Mr. K. Ananda Babu, Dept. of Civil Engg., participated in a Short Term Course “Earth quake Resistant Design of Buildings and Structures” held at S.G.S.I.T.S., Indore from 20<sup>th</sup> Nov. to 1<sup>st</sup> Dec 2006.
- ⇒ Mr. Neeraj Agarwal, Dept. of Comp.Sc., attended a workshop on “Redundant Arrays of Inexpensive Disks (RAID) Implementation of Storage Devices”, organized by EMC<sup>2</sup> Corp. Pvt. Ltd., held at Faridabad from 26 February - 02 March 2007.

### **Papers Presented by the Students:**

1. The paper entitled “*Glogging*” was presented by **Mr. Sushil Vijaywargi of IT – II yr. and Mr. Rahul Jain of CS –II yr.** in ‘Techmaze 2007’ organized by IEEE at IPS Academy, Indore on 05 April 2007, and won **I Prize**.
2. The paper entitled “*Security scheme against misuse of ATM & Debit Card*” was Presented by **Ms. Neha Korla and Ravish Bahety –CS II yr.** in “Navaayam-07”, on 30 March, 2007 at Barkatulla University Institute of Technology, Barkatulla Univ., Bhopal.
3. A technical paper entitled “*Healthier Food through Nano Technology*” was presented by **Mr. Ayushya Mudgal**, EC-II yr. in “Tech-Fest” held at IIT , Delhi from 23-25 February, 2007.

4. **Mr. Ayushya Mudgal** –EC-II yr. participated in paper presentation “PRASTUTI” on “GRIP”(Robotics)& “SRIJAN”(Technical case study) held at MANIT, Bhopal from 26-28 February 2007.

#### **Achievements of the students**

- Mr. Ayushya Mudgal of EC-II yr. won the II prize at Tech-Quiz, “**JIGYASA**” held at MNIT, Bhopal from 26-28 Feb. 2007.
- Mr. Ayushya Mudgal of EC-II yr. participated at Tech-Fest, “Tech-Vista” held at SVITS, Indore from 08-10 October, 2006 in Zooming Cars competition and won the participation certificate.

## **CURTAIN RAISER**

**Tata Consultancy Services (TCS)** is one of the leading information technology companies in the world. With a workforce of over 74,000 professionals spread across more than 50 global delivery centres, it helps organisations stay ahead with new technology. Its clients include seven of the top ten corporations in the Fortune 500 list of the largest corporations in the United States. With technical expertise and employing a flexible approach to client relationships, TCS offers its clients: consulting, IT services, business process outsourcing, infrastructure outsourcing, and engineering and industrial services.

Since its inception, the company has invested in new technologies, processes, and people in order to help its customers succeed. With inputs from its innovation labs and university alliances, and drawing on the expertise of key partners, TCS keeps clients up-to-date with new technology. This has helped the company meet various benchmarks of excellence in software development - it is the world's first organisation to achieve an enterprise-wide Maturity Level 5 on quality improvement models, CMMI® and P-CMM®, using the most rigorous assessment methodology, SCAMPISM. The company is listed on the National Stock Exchange and Bombay Stock Exchange in India

Tata Consultancy Services (TCS), a leading IT services, business solutions and outsourcing organization, announced that it had signed a Memorandum of Understanding (MOU) with the Government of Andhra Pradesh to acquire 75 acres of land to develop a state-of-the-art development facility near the new international airport in Hyderabad. TCS will invest up to Rs 400 crore in the facility to create a capacity of 15,000 seats at Adibatla, which is part of Andhra Pradesh Industrial Infrastructure Corporation (APIIC) promoted Special Economic Zone.

According to the MOU, the AP government will help facilitate acquisition of land, provide infrastructural support through APIIC and other related agencies as well as

provide a Single Window Clearance support for quick, easy and efficient implementation of the project. The project will be part of an SEZ and be eligible for all requisite incentives as per the State's policy.

TCS currently employs over 5,000 professionals in Hyderabad. In 2007-08, TCS has plans to hire an additional 2,500 persons for its operations in Hyderabad to serve its customers in industry verticals like telecommunications, hi-tech, healthcare, government, insurance and banking, requiring various technology platforms including Microsoft, Java, SAP, Oracle as well as services such as Business Intelligence, Software Testing and Engineering and Industrial Services.

#### About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, business solutions and outsourcing organization that delivers real results to global businesses, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled services delivered through its unique Global Network Delivery Model, recognized as the benchmark of excellence in software development.

A part of the Tata Group, India's largest industrial conglomerate, TCS has over 89,000 of the world's best trained IT consultants in 47 countries. The Company generated consolidated revenues of US \$4.3 billion for fiscal year ended 31 March, 2007

Tata Consultancy Services or TCS is considered as India's biggest software information technology and outsourcing company, even ahead of Wipro and Infosys, is planning a big set up in China, reports the Financial Times. "If any country has the potential to scale up like India, it's China," N. Chandrasekaran, company's global head of sales and operations said.

"The average salary for the freshers joining as trainees is Rs 2.5 lakh to Rs 3.5 lakh per annum while trainees from management school fetch Rs 5.5 lakh per annum," he said.

Padmanabhan said 21 per cent of the TCS workforces are women and the company would make conscious effort to increase their number. However, the company would not opt for gender-based recruitment to promote women employment, he said.

Referring to the attrition rate, he said 57 per cent of associates in TCS have greater than three year experience and the attrition rate for the company is eight per cent in FY'05.

ASIA'S largest software company, the \$2 billion Tata Consultancy Services, will double its R&D headcount in Pune by 2008. It has 2,500 people at the Tata Research and Development and Design Centre.

Announcing this, S Ramadorai, CEO and MD, TCS, said the company is looking at opening a development centre in Nagpur. "Like Pune, which is looking very important on the TCS map, Nagpur is an ideal location to expand in the state because of the availability of graduates."

Having set up development centres in Mumbai, Hyderabad and Bangalore, TCS is now going to centres like Kochi, Coimbatore, Bhubaneswar, Chandigarh, Lucknow, Noida,

Gurgaon and Ahmedabad. Outside India, it has development centres in Brazil, China, Australia, the US and Uruguay. He said TCS operations in China will grow to 5,000 in five-seven years.

“Most of the growth will happen in India,” admitted Ramadorai, who’s head of the NASSCOM forum to push domestic consumption of IT. “We have 640 million people in rural India. We should all ask ourselves what is the technology that is going to enable that adoption.” Earlier, speaking at CII’s annual day, he said in two decades India has established itself as a global leader in IT with software exports touching \$36 billion this year (last year it was \$ 23 billion). “If the growth is sustained at 25 per cent, the industry will employ 9 million people by 2010 with exports touching \$60 billion. If we can fuel innovation, we can add \$15 billion more.”

## **Budget Analysis -2007**

### **A simple way to understand Budget and its impact**

On February 28<sup>th</sup> the awaiting ‘Budget 2007’ was announced. With the country setting a scorching pace of growth and the stock market keeping pace, everyone was in a hope that announcement made on Feb 28<sup>th</sup> will not upset India in anyway.

This seems to be a reasonable budget. The reduction in fiscal deficit is a positive sign. The Budget 2007-8 as expected has continued with its thrust on fiscal prudence and ensuring that growth is inclusive. As expected allocations for agriculture, education, and infrastructure has been increased to strengthen the foundations for sustained economic growth.

But the thrust on special areas like education and infrastructure could have been more aggressive. There was not much need to bring in the Dividend Tax, or include Free Samples and ESOPs under the Fringe Benefit Tax. .

The list of let downs is pretty long and to start with, firstly, dividend distribution tax effectively 17% (including surcharge) is very steep and unjust. Typically, a Corporate rate of Income tax at 34%, maybe another 2% FBT and out of that if they distribute say 25 to 30% profits as dividend there is a differential impact of 3 to 4% by way of Dividend Distribution Tax. Also there were wide expectations that given the current environment, Finance Minister will do away with the surcharge but instead of doing that there has been marginal increase by way of higher education cess. It’s the duty of any government to make investment in basic infrastructure like education and health.

Also personal income tax rates exemption increase from Rs 1 lakh to Rs. 1.5 lakh looks like a joke and also, there is no increase in the limit of all the investments put together. The only remedy to inflation, which the Finance Minister could have administered, is by atleast giving some relief in tax by increasing the exemption limit of Rs 2 lacs or atleast

Rs. 1.5 lac and similar increase in the limit for investments to be exempt from Income tax.

Similarly, FBT on ESOP is again a very conservative and a negative step. India's only strength is manpower. Companies need to attract and retain manpower. Similarly, extension for MAT for IT companies is not in line with what were earlier policy announcements and assurances.

Here I am highlighting the major announcement made in the budget and thereafter the analysis and effect on specific sectors.

## **Taxation**

The detailed study of the Budget reveals that there is no special concession or benefit granted to the tax payers.

The general exemption limit, which has been hiked by just Rs 10,000 for individuals and Hindu Undivided Families (HUF), would practically mean saving an income tax of just Rs 1,000 for all individuals, women tax payers (below 65 years), and HUFs. Senior citizens will gain Rs 2,000.

The basic exemption limit is hiked to Rs 110,000 for individuals and HUFs. It is Rs 145,000 for women tax payers (below 65 years), and is Rs 195,000, for senior citizens.

In the context with the inflation, this increase in the exemption limit will certainly not cheer the taxpayer.

An additional surcharge has been proposed in this Budget, known as 'Secondary and Higher Secondary Education Cess'. The additional surcharge of 1% will be levied which will increase the taxpayers' burden. Thus this will exaggerate inflation. So it was a give and take mechanism adopted by the finance minister.

## **Medical Benefit**

The limit of deduction for mediclaim policies will be hiked to Rs 15,000 per annum, while senior citizens will enjoy this deduction up to Rs 20,000 per annum. This was expected to Rs.50000 considering the increasing the medical bills.

## **Capital Gain Tax provisions with retrospective effect.**

Taxpayers who derived long-term capital gains during the current financial year 2006-07 will have no option to save income tax: the maximum amount to be invested in tax saving capital gain bonds has been fixed at Rs 50 lakh.

**Tax Deduction at Source (TDS) will provide some relief to small taxpayers:** the limit for non-deduction of income tax from bank fixed deposits and post office investments has been increased to Rs 10,000 from the existing Rs 5,000.

For other payments of interest, TDS provisions is applicable even if the amount exceeds Rs 5,000 per annum.

The rate of TDS on commission payments and professional fee has been increased to 10% with no hike in the limit for non deduction. If any machinery, plant or equipment is given on hire, the TDS rate will be 10%.

### Interest on Education Loan

Those who have taken a loan for their children's higher education can enjoy a good tax benefit. Till now, the interest on such loans was allowed as a deduction only to the person taking the loan for his own education. According to the Budget, there will be a deduction for the interest on loan taken for education of the individual's relative ('relative' would mean spouse as well as the children of the individual).

### Dividend Distribution Tax and Stock Options

Taxpayers will really feel the pinch with the hike in the Dividend Distribution Tax. Similarly, stock options granted to employees will be subjected to FBT, making companies think whether to give stock options or not.

### Custom Duty

Indian companies wanted customs duty rate to be reduced from the peak rate of 12.5% to 10%, the peak rate of customs duty reduced to 10% with few exceptions. Thus the impact is positive.

### Specific Sector wise analysis

<i>Sector</i>	<i>Expectation</i>	<i>Changes</i>	<i>Impact</i>
<i>Automobile</i>	Excise duty rate across passenger vehicles – passenger cars (excluding small cars) and UVs (6-12 seater) to be reduced to 16% from the existing 24.5% duty.	No Changes took place	Neutral
Cement	Specific excise duty on cement to be reduced from Rs 408/tonne to Rs 300-350/tonne.	Excise duty on cement has been reduced from Rs.400/tonne to Rs.350/t with the boundation of retail price not exceeding Rs190 per 50 Kg per bag. If prices exceeds Rs.190 then Excise duty will increase	Positive (Cheaper Cement) Negative ,if the demand and supply

		from 408/t to 600/t	mismatch
FMCG	Excise duty on ready to eat packaged food and instant mixes to become 0 from 8	Excise duty has been fully exempted on food mixes (including instant food mixes)	Positive (Cheaper Packaged Foods)
IT	Excise duty on packaged software to be withdrawn / reduced.	No Change	Neutral
Media and Entertainment	A duty waiver and service tax holiday for five years	No Change	Neutral
Film Industry	zero customs duty on the import of digital exhibition equipment and service tax exemptions for the digital cinema companies.	Digital Cinema Development Projects have been notified under Project Imports Scheme	Positive Project Cost will be reduced
Animation Industry	Removal of service tax, scrapping sales tax on software and a ten year exemption from import duty on hardware	No Change	Neutral
Metal Industry	Excise duty should be reduced to 8% in the case of steel industry from the prevailing rate of 16%.	No Change	Neutral
Oil and Gas	Custom duty on LNG import& crude oil should be reduced from 5% to nil. Ad Valorem rates in the case of petrol and diesel should be reduced from 8% to 6%.	No Change  Ad Valorem rates in the case of petrol and diesel has been reduced from 8% to 6%	Neutral  Positive Petrol and Diesel Prices may reduce
Textiles	Cut in excise duty on man-made fibers and yarns from 8% to 4%.	No Change	Neutral

### Advancement in Infrastructure Development

The 32 per cent increase in allocation for Bharat Nirman Scheme and increase in National Highway Development Programme (NHDP) to Rs. 12,600 crore reflect continued thrust on infrastructure and should sustain high rate of cement consumption. However, cement industry which is critical in the scheme of infrastructure development will be greatly distressed by the increase in Excise duty related to the retail price. This is likely to have a negative impact for the sector by affecting the realizations and hence the margins of

cement companies. Furthermore, the administration of this scheme will be a terrible to the industry. The differential duty regime is a crude way to coerce the industry to keep the prices down. It is possible that this may work in reverse direction as cement price is a factor of demand and supply and increased cement duty may be passed on to the consumer in certain regions facing supply deficit situation.

One can say that there are some positive steps like no tax on capital gains or no increase in service tax but, these seem like small concessions and increase in service tax has been high which is not justified.

### **Permission to Indian Investors to invest abroad through Mutual Fund**

Investors may not see this as a big driver to invest their funds overseas as the Indian markets in any case have been giving considerable returns.

### **Conclusion**

Thus this budget seems to be extension on the last year budget with few Changes which will have insignificant impact on the growth of the economy. While the economy is doing well and the fundamentals are strong, the budget has failed to adjust inflation, concerns of common man and been unsuccessful in continuing the reform process leading to lower tax collections.

**Prof. Nitin Tanted**  
**MBA**

**TECH. ERUPT**

## **Secrets - Safe with Quantum Cryptography**

Cryptography is the art of writing messages so that only intended recipient can understand it.

Through ages, people have an incurable tendency to find out others' secrets; this is after all a 'human' effect.

We take up a pretty usual scene where there are two seasoned players, say A and B. There's no problem in the usual time where A and B communicate on a network (say chatting). The problem arises when there is an intruder between A and B, say E.

It's easy for E, if the message written between A and B are as it is – 'Plaintext' but if A and B communicated in an encrypted messages.

Encryption is done by using an encryption program which programs its mathematical magic on it and the result is a –'Cipher text'.

Now Encryption is a technique that depend on a 'key' to lock the messages, so if B does not know the key used to encrypt the message , it still remains the encrypted message . so 'key' is basically a string of numbers that the encryption program uses when turning messages into cipher text.

### **Now how is the Encryption done?**

1. The first idea is the 'public key and Private key'

Where private key is used to decrypt messages while public key is used to encrypt the messages. Its just like a box that can be locked by any key would open by a particular key . The public key / private key system relies on the fact that there are some mathematical relations / operations that take longer to undo than do

2. Another method is 'One Time Pad' (OTP) .

The OTP is a random key, the same length as the message, which is applied once, and only once out of sheer out of sheer paranoia, this pad needs to be:

- a. Completely random so that e cannot detect patterns and figure out the pad.
- b. Used only once, so its useless even if E finds it out.

### **Sounds pretty Safe?**

It sounds pretty safe, doesn't it? To be honest, safety doesn't mean safety forever. Today's computers would take ages to crack an encrypted message.

Quantum computing is going to turn complex mathematics into child's play.

The first to succumb is public key / private key system. Nobody can deny that there is a relationship between private/public key, after all these are set by a same person so, as computers become more powerful, scientists will have to keep refining this technique to keep private keys private .

OTP is quite secure. The trouble, however is the key needs to be shared in a way that is perfectly secure, otherwise the entire effort is pointless

So, here comes in lay is 'Quantum Cryptography' before quantum computing arrives and exposes all our embarrassing secrets.

### **Light is the secret!!!**

In the future, messages would be encrypted using physical properties of light to aid in securing communication rather than mathematics.

Light behaves strongly in the sub atomic world. Sometimes it's a wave and sometimes it's a particle called 'photons'. In quantum world, things are a little

different. These are properties of photons that are tied together so tightly that measuring one property will cause a change in others, distributing the entire system. This would, help in detecting the attempt of eavesdrop.

### **The Scene behind-<<<**

The 'Quantum Randomness' which is , sub-atomic part settles in the state you observe it quite tricky!!!

But you never know in which state out of many, is it going to settle.

Better than OTP, where hardly anything is random-programs are written that stimulate randomness, but are actually predictable.

This quantum cryptography, basically works on the concept of 'Heisenberg's uncertainty principle' and the principle of 'polarization of light'.

**Quantum Entanglement** – Concept of quantum entanglement talks about photons that are closely related that it's impossible to describe one without describing others, no matter how far and apart.

The real mystery is that any attempt to measure the properties of one photon will immediately affect the other one.

So, this almost nullifies the chances of finding the key of encryption. But the results are same with our players A and B for the reason they are still using the same key while E doesn't still know this because E doesn't have the key and any form of mishandling of message(cipher text) would let A and B tell about E.

### **Reality Checks-**

The concept of quantum cryptography has been around since late 1970 s, and working systems have been setup in educational institutions as early as 90s.

But quantum cryptography is possible only over fiber –optic lines.

Entanglement is a fun concept but really difficult thing to do and once it is done it is easy to control over small distances around 60 km or so.

Quantum cryptography may be ultimate safeguard against eavesdroppers - even with quantum computers, highly useful for keeping military secrets etc.

### **Money comes after privacy!!!**

Companies such as Network's magic and Geneva's Id Quantique's is already promoting and providing quantum cryptography solutions to banks and military.

The infrastructure for a quantum cryptography system is a massive expense, whose information could possibly be so secret that they wouldn't mind shelling out obscene amounts of money to protect it. But this of course gives a sure shot protection against eavesdropping and provides 100%secure environment for transmitting and receiving messages.

Your Secrets- Safe with 'Quantum Cryptography'

**Dhruvika Raj IT-II yr.**

# DO YOU KNOW?

## Some Interesting Facts

1. The largest book in the world is an atlas which is in the British Museum. It is 05 feet 10 inches high and 03 feet 06inches wide.
2. The first product that Sony came out with was the rice cooker.
3. The average lead pencil can draw a line that is about 35 miles long or you can write almost 50,000 words in English.
4. The world's highest cricket ground is in Chail, Himachal Pradesh built in 1893 after leveling a hilltop, this cricket pitch is 2444 meters above the sea level.
5. The largest employer in the world is the Indian Railway System.
6. National Aids Research Institute is situated at Pune, Maharashtra
7. The Japanese have no names for the months of the year, they have only numbers.
8. The great wall of China is the only man made thing that can be seen from the space.
9. Albatross is the largest bird in the world, sometimes with a wingspan of over 10 feet. It covers a distance of 30,000 kms. in just 80 days.
10. There is a lake in the West Indies which is full of coal-tar instead of water.

**Ajay Suryawanshi**  
**MCA-Iyr.**

## Why Accuracy Is Important?

If you believe that **99.9%** accuracy is acceptable, then

### Every Hour:

18,322 pieces of mail would be mishandled

22,000 checks would be deducted from the wrong bank accounts

### Every day:

12 newborn babies would be given to wrong parents

55 incorrect drug prescriptions would be prescribed

48,000 books would be shipped with the wrong cover

### Every year:

81,000 faulty rolls of 35 mm film would be loaded

2 million documents would be lost by the IRS

### In addition:

320 entries in Webster's Third New International Dictionary of the English Language would be misspelled

## DO YOU KNOW THE MAN.....?

Do you know the man,  
Who failed in business at 31  
Was defeated for legislature at 32  
Failed in business again at 34  
Lost his beloved at 35  
Had a nervous breakdown at 36  
Was defeated in election at 38  
Was defeated for congress at 43  
Again defeated for congress at 46  
Was defeated yet again at 49  
Was defeated for senate at 55  
Was defeated for Vice President at 56  
But was elected president at 60?  
The man is *Abraham Lincoln*

**Message:** Fortune favours the brave.

## LINCOLN'S LETTER TO A HEADMASTER

*"Teach Him, Sir"*

Respected teacher,

My son will have to learn, I know, that all men are not just, all men are not true, but teach him also that for every scoundrel there is a law, that for every selfish politician there is a dedicated leader. Teach him that for every enemy there is a friend. It will take time, I know, but teach him, if you can, that a dollar earned is of far more value than five found.

Teach him to learn to lose and also to enjoy winning. Steer him away from envy if you can. Teach him the secret of quite laughter. Let him learn early that the bullies are the easiest to lick. Teach him, if you can, the wonder of books... but also give him quite time to ponder over the eternal mystery of birds in the sky, bees in the sun, and flowers on a green hillside. In school, teach him it is far more honorable to fail than to cheat.

Teach him to have faith in his own ideas, even if everyone tells him they are wrong. Teach him to be gentle with gentle people and tough with the tough. Try to give my son the strength not to follow the crowd when everyone is getting on the bandwagon. Teach him to listen to all men, but teach him also to filter all he hears on a screen truth and take only the good that comes through. Teach him, if you can, hoe to laugh when he is said. Teach him there is no shame in tears. Teach him to scoff at cynics and to beware of too much sweetness. Teach him to sell his brawn and brain to the highest bidders, but never to put a price tag on this heart and soul. Teach him to close his ears to a howling mob.... and to stand and fight if he thinks he is right.

Treat him gently, but do not cuddle him because only he test of fire makes fine steel. Let him have the courage to be impatient; let him love the patience to be brave. Teach him always to have sublime faith in himself because then he will have sublime faith in mankind. This is a big order, but see what you can do.... He is such a fine little fellow, my son.

# FUN ZONE

## Cool Definitions.....Just enjoy

- Conference: The confusion of one man multiplied by the number present.  
Compromise: The art of dividing a cake in such a way that everybody believes he got the biggest share.
- Conference Room: A place where everybody talks, nobody listens, and everybody disagrees later.
- Smile : A curve that can set a lot of things straight.  
Yawn: The only time married men ever get to open their mouth.  
Experience: The name, men give with pride, to their mistakes.  
Committee: Individuals who can do nothing individually and sit to decide that nothing can be done together as well.  
Tears: The hydraulic force by which masculine will power is defeated by feminine water power.

## Stupidity around us

### At the Movie, When you meet friends.

Stupid Question: Hey, what are you doing here?

Ans: Don't you know, I sell tickets in black over here.

### When you see a friend/colleague with incidentally shorter hair:

Stupid Question: Hey, have you had a hair cut?

Ans: No it's autumn and I'm shedding

### At a Restaurant: When you ask the waiter.

Stupid Questions: Is the "Butter paneer masala" good?

Ans: No it is terrible and made of adulterated cement, we occasionally spit into it

### In a Bus: A heavy lady, wearing pointed high heeled shoes steps on your feet.....

Stupid Question: Sorry, did that hurt?

Ans: No, not at all, I am on local anesthesia....why don't you try again.

### When the phone rings at your place and the caller ask you.

Stupid Question: Who are you?

Ans: Congratulations this is God and your call is being forwarded to hell.

Ajay Suryawanshi  
MCA – I yr.

## IGNORE NCE IS BLISS – AN ANECDOTE

Once upon a time there was a bunch of baby frogs participating in a competition.  
The target was a to get to the top of a high tower.  
A crowd of people had gathered to observe the race and encourage the participants.....  
The start shot rang out.....

Quite honestly:

None of the onlookers believed that the baby frogs could actually accomplish getting to the top the tower.

Words like:

“Ah, it’s too difficult!!!  
They’ll never reach the top.”

Or:

“Not a Chance ...the tower is too high!”  
One by one some of the baby frogs fell off....  
.....Except those who fastly climbed higher and higher .....

The crowd kept on yelling:

It’s too difficult. Nobody is going to make it!”  
More baby frogs became tired to make it!”  
....But one kept going higher and higher....  
He was not about giving up!

AT the end everybody had given up, except the one determined to reach the top!  
All the participants naturally wanted to know how he had managed to do, one of the competitor asked the winner, what was his secret?  
The truth was.....  
The winner was deaf!!!!  
The lesson to be learned:  
Don’t ever listen to people who are negative and pessimistic....

...they will deprive you of your loveliest dreams and wishes you carry in your heart!  
Always be aware of the power of words, as everything you hear and read will interface with your actions!

**Rahul Dalvi**  
**EC-II yr.**



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#### ***THOUGHT OF THE VOLUME***

**A man would do nothing if he waited until he could do so well that no one would find fault with what he has done.**