Civil Dept., Sir M. Visvesvaraya Institute Of Technology, Bangalore

INFRA TODAY

Volume II, Issue I

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BAMBOO...IS IT ONLY A PLANT..??

Special points of interest:

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Supported By: Prof. K. R. KINI, Principal I/C

Dr. B. R. Karnure, Head

Ms. Vyshnavi D.R., Assisstant professor



VISION

To be better in imparting quality technical education and to prepare outstanding educators with skilled power and intelligence who can contribute significantly to the society.

MISSION

To develop talented youngsters and enrich their knowledge in effective uses of technology and develop them into competent technocrats to provide service to public.

Program Educational Objectives (PEOs):

- 1. Graduates will become leaders in the industries associated with civil engineering and become professional entrepreneurs. They will be experts working in public sector, private sector, and international organizations.
- Graduates will engage in continual learning by pursuing advanced degrees or additional educational opportunities through
- 3. coursework, professional conferences and training, or participation in professional societies. Graduates will adapt to different roles and responsibilities in multidisciplinary environment by respecting professionalism and ethical practices. They will contribute to the well-being of the society and environment through responsible practice of engineering profession.

Program Outcomes (POs):

PO1-Engineering knowledge: Apply the knowledge of mathematics, science, engineering Fundamentals and an engineering specialization to the solution of complex engineering problems in CIVIL Engineering.

PO2-Problem analysis: Identify, formulate, review research literature, and analyse complex Engineering problems in CIVIL Engineering reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. PO3-Design/development of solutions: Design solutions for complex engineering problems and design system components or processes of CIVIL Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4-Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments in CIVIL Engineering, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5-Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities in CIVIL Engineering with an understanding of the limitations.

PO6-The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice in CIVIL Engineering. PO7-Environment and sustainability: Understand the impact of the professional engineering solutions of CIVIL Engineering in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development. PO8-Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9-Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10-Communication: Communicate effectively on complex engineering activities with the Engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11-Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

MESSAGE

From the Principal:



I am very happy to know that Civil Engineering Department is publishing one more addition of their News Letter" INFRA TODAY " for the year 2016-17. The news letter brings out various activities and achievements in a nutshell.

The icing on the cake has been the outstanding performance of Pranav .P, bagging all the 12 gold medals and securing University 1st rank in the Civil Engineering branch for the academic year 2015-16.He will always remain as a beacon of inspiration to all the students of Sir MVIT and especially to the students of Civil Engineering Department.

The Department has been focusing on all round growth of students through academic ,industrial visits, department fest CIVIONIX and having regular guest lectures by experts. Students have participated and excelled in various symposiums and intercollegiate events by securing prizes. My felicitations and best wishes to the editorial team and others involved in publishing the news letter.

From the Head Of Department:



It gives me immense pleasure that the Department of Civil Engineering is publishing the departmental News Letter, Infra Today during 2016-17. I appreciate the efforts of the Editorial Committee in bringing out this magazine.

I am also happy that our alumni Mr. Pranav .P(USN 1MV12CV038) secured 1st rank and won Twelve Gold medals awarded by VTU recently. He had also won the Student Merit Award for the year 2016. I congratulate him and also those who are directly or indirectly instrumental in this. I am confident that, with good guidance and sincere hard work our Students are able to achieve many milestones like this..

List of Programs organized under respective departmental forums/clubs:

- 1. The VIII sem B.E Civil Engineering students who are studying Geographic Information System as their elective subject visited Karnataka State Remote Sensing Application Centre on 27th February 2016 along with Dr Shivanna S. & Sri H.Ravikumar, Associate Professors.
- The Department of Civil Engineering conducted the department fest Civionix 2016 on 16.4.2016.
- 3. Under field visit IV Sem B.E Civil students visited Chitravathi Dam near Bagepalli of Chikballapur district along with two faculty members Dr Shivanna S. & H.Ravikumar.
- 4. The VI sem B.E Civil Engg. students visited Karnataka State Natural Disaster Monitoring Centre (KSNDMC) near Yelhanka, Bangalore ON 17th September 2016 along with Dr. Shivanna .S, Assoc. Prof. & Sri H.Ravikumar, Assoc Prof.
- 5. Nirmaana forum of Civil Engineering Department organized a guest lecture on "Importance & Applications of Fluid mechanics" by Dr S.Sundaram, Ex. Principal, R L Jalappa Institute of Technology on 23.9.2016.
- 6. The Department of Civil Engineering conducted parent alumini meet on 24.9.2016 at Sir MVIT.

List of Faculty who has registered for PhD:

Name of the Staff	Designation	Year of Registra- tion	Specialization	Name of the Institute	University	
Sri KVR Prasad	Associate Profes- sor	2007	Highway Engineering	PESCE, Mandya	VTU	
Sri H. Ravi Kumar	Associate. Profes- sor	2007	Structural Engineering	MSRIT, Bangalore	VTU	
Smt. Pavan	Asst. Professor	2010	Environmental Engineering	BIT, Bangalore	VTU	
Smt. Pradeepa	Asst. Professor	2014	Structural Engineering	BMSCE, Bangalore	VTU	

Achievements of Faculty:

- Dr Shivanna S., Associate Professor presented a paper "Water Quality Assessment for Agriculture in Chikkaballapur District and attended the 3rd National Conference on "Futuristic Technology in Civil Engineering for Sustainable Develop ment held on 9th May 2015 conducted at SJBIT, Bengaluru.
- Sri K.V.R Prasad, Associate Prof. presented a research paper titled "Laboratory Performance & Evaluation of Bituminous mixes using PET waste" in the one day national seminar on "Advances in Structural, Highways & CADD Engineering held at Ghousia college of Engineering on 19th May 2015.
- Dr Shivanna S., Associate Professor has been elected as Life Member to the "Association of Hydrologists of India, Andhra University, Waltair, (A.P) on 20th July 2015.
- Smt Anitha J.,Smt S.Pradeepa, Assistant Professors & Mr Pranav .P, VII sem B.E student have published a research paper Utilization of Iron Ore Tailings in Masonry Blocks in the National Conference on Design, Materials & Constructions which was held from 20th to 22nd August 2015 at VEL TECH Rangarajan Dr. Sagunthala R&D Institute of Science & Technology, Chennai.
- Smt Ramya N., Assistant Professor published a paper An Experimental Investigation on Mechanical Properties of Hybrid Fiber Reinforced Concrete (Rockwool, Polypropylene Fiber, Steel Fiber) in the National Conference on Design, Materials & Constructions which was held from 20th to 22nd August 2015 at VEL TECH Rangarajan Dr. Sagunthala R&D Institute of Science & Technology, Chennai.
- Sri K.V.R Prasad, Associate Professor published a research paper combined by with Dr M.Prem Swaroop Reddy, Professor, Dept. of Civil Engineering, RITM, B'lore on comparative study on performance of Bituminous concrete mixes using plastic waste in dry process in International Journal of New Technologies in Civil Engg. (IJNTCE) in volume no. 2 Issue 1, August 2015.
- Dr Shivanna S., Associate Professor has been elected as the Programme Committee Member for the "Second International Conference on Concrete and Construction Technology" to be held at Vijaya Vittala Institute of Technology, during 5th to 9th November 2015.
- Dr S.Shivanna, Associate Professor participated, presented and contributed Research paper entitled A Study on the Ground Water Quality for Agriculture in Chikkaballapur district, Karnataka in the National seminar on "Earth Resources Assessment & Management" held on 24th & 25th November, 2015 in the Department of Applied Geology, Kuvempu University, Jnanasahyadri, Shankaraghatta.
- Sri K.V.R Prasad, Assoc. Prof. & Sri Suresh B., Asst. Prof. presented a research paper on "Mitigatory measures to decongest & Improve Traffic Condition at Hebbal Junction" at 4th National Conference on "Futuristic Technology in Civil Engineering for Sustainable Development" (NCFTCES 16) conducted by Dept. of Civil Engineering, SJBIT on 7th May 2016 along with final year Engineering students.
- Sri K.V.R Prasad, Assoc. Prof. published a paper on "Study on performance Evaluation of Dense bituminous concrete mixes using PET Waste", in IJRET journal, vol. 5, Issue 5, May 2016.
- Smt Ramya .N, Asst. Prof., Smt Pradeepa S., Asst. Prof & Smt Anitha .J & Mr. Vishal Singh & Shadab Khan, VII sem B.E Civil Engg. students have published a paper:-"Experimental investigation on Partial Replacement of Coarse Aggregate by Palm Kernel Shell and Cement by GGBS in volume 5, Issue 1 of International Journal of Research in Advent Technology (IJRAT) (e-ISSN 2321-9637).

- Sri K.V.R Prasad, Assoc. Prof. & Sri Sreenatha M., Asst. Prof. presented a paper on "Study on Alternate Effective Solutions for the proposed Grade Separator at Kundenehalli Gate junction in the two days National Conference on "Recent Advances in Civil Engineering" RACE organized by the Department of Civil Engineering on April 21st & 22nd, 2016 in association with Indian Concrete Institute (ICI) at SJCIT, Chickballapur.
- Dr S.Shivanna, Assoc. Prof., Sri H.Ravikumar, Assoc. Prof. & Ms. Vyshnavi D.R, Asst. Prof. presented a paper "Evaluation of Ground water quality in Devanahalli taluk.and attended the 4th National Conference on "Futuristic Technology in Civil Engineering for Sustainable Development held on 7th May, 2016 conducted at SJBIT, Bengaluru.
- Smt Anitha J, Smt Pradeepa .S, Smt N.Tamil Selvi, Asst. Professors & VIII Sem B.E Civil students Pranav .P & Arpit Jaketia published a paper "Study on Workability and Flexural Strength of Concrete by partially replacing with Egg Shell and M-Sand in Volume 4,Issue 8 of International Journal of research in Advent Technology (IJRAT) (e-ISSN 2321-9637).
- Sri K.V.R Prasad, Assoc. Prof. presented a research paper on "Improvement in the properties of Bituminous Pavements
 using recycled PET Waste materials" at a National Conference on Fifteen Years of PMGSY (FYPMGSY) held at IIT, Roorkee during August 6 to 7, 2016.
- Dr S.Shivanna, Assoc. Prof. published a paper titled Remote Sensing and Hydro-Geomorphological Studies to evaluate Groundwater Potential zones of Dakshinapinakini River Basin, Chikkaballapura and Bangalore Districts, Karnataka in International Journal of Research in Engineering and Technology, eISSN:2319-1163/pISSN:2321-7308 in volume:05 Issue:07/July 2016.
- Smt Pradeepa S., Asst. Prof. has completed four course work subjects as a prerequisite for the Ph.D Programme.
- Dr S.Shivanna, Assoc. Prof. has been appointed as a Member of the Board of Examiners for PG in the subject: Geology (Professional Board) 2016-17 Exams.
- Dr S.Shivanna, Assoc. Prof. has been appointed as Editorial Board Member of International Journal of Emerging Technology & Advanced Engineering

Achievements of students:

- ◆ The following VIII Sem B.E (Civil) students:- Raja V., Sharana Basava .H, Venkatesh secured 2nd place in the event "Real Estate Tycoon 3.0" at "SAMEEKSHA 2015" held by MSRIT, Bangalore during 27th & 28th April 2015.
- Mr. Ankit Pattnaik, USN -1MV13CV010, student of VI Sem B.E Civil has secured 100/100 in the subject 10CV43 Structural Analysis I in the recently held VTU exams of May/June 2015.
- The following VIII Sem B.E (Civil) students: Raja V., Saddam Hussain, Venkatesh G. secured 1st place in "Ground Zero" at "NIRMAAN 2015" International Civil Engineering Student Symposium held by BMSCE, Bangalore held during 17th & 18th October 2015.
- The following VIII Sem B.E (Civil) students:- Raja V., Sharana Basava. H secured 2nd place in 'MAD CAD' at 'NIRMAAN 2015' International Civil Engineering student symposium held by BMSCE, Bangalore on 17th October 2015. Sir MVIT team secured overall championship.
- The following VI Sem B.E (Civil) students:- Rakshit K.B & Soundaraya S. participated in CONCRETE FAIR 2015, National
 Level Concrete Events organized by Department of Civil Engineering, R.V College of Engineering, Bengaluru in association
 with Indian Concrete Institute (ICI).
- Mr Pranav.P, USN-1MV12CV038 has secured the highest marks in VII Semester B.E Civil Engineering, VTU Nov/Dec 2015 exams.
- Ms. Medha, VI Sem B.E (Civil) was the winner of Tech Press event & Mr Rakshit K.B, VI Sem B.E (Civil) was the runner up
 of Tech Press event organized as part of CINNOVIL'16, Technical Fest conducted on 24th February 2016, organized by
 Department of Civil Engineering, BMSIT, Bengaluru under the aegis of Indian Concrete Institute

- ◆ The following VIII Sem B.E (Civil) students:- Pranav .P & Ashish Achha .M attended Global Leader Experiences leadership development programme held at Bangalore from 24th to 27th August 2015 in partnership with IIM Bangalore and RV College of Engineering.
- Mr Dhruv Nambiar, VIII Sem B.E (Civil) student has been selected for the grant of Permanent Commission in the Flying branch of Indian Air Force. He will be undergoing training for the course at Air Force Academy, Dundigal, Hyderabad.
- ♦ The following VIII sem students: Yashaswini S., Arpit Jaketia, Shravan J., Ashish Singh, Abhishek Shekhawat, Vikash Kumar, Anupama V.S, Vishal Priyadarshi, Amrit Singh, Arka Singha and Kumar Saurabh were selected in the campus recruitment conducted by TCS on 9.9.2015.
- The following VIII sem students: Abhishek Shekhawat, Aditya Hada, Arka Singha, Ashish Singh, Chandan S., Bhargavi, Kumar Saurabh, Mohith S., Shivakumar J. & Vivek V. were selected in the campus recruitment conducted by Accenture on 22.9.2015.
- Ms. Soundraya S., VI Sem B.E (Civil) won I place in National Level Technical Symposium (paper presentation) at Nanda Engineering College, Erode, Tamil Nadu held on 18th March 2016.
- ♦ Ms. Soundraya S., VI Sem B.E (Civil) secured II place in Technical Paper presentation during REVAMP 16 held on 31st March 2016 in Reva University.
- Ms. Soundraya S., VI Sem B.E (Civil) won III place in Technical paper presentation during CINNOVIL 16 held at BMSIT, Bangalore on 24th March 2016.12)
- Mr. Shree Ram Mustapure, VI Sem B.E Civil student presented a Technical paper in the National Conference on Challenges of Civil Engineering Innovations (NCCCEI-2016) titled "Rain Water Harvesting System at Sir MVIT Bangalore a case study" organized by Department of Civil Engineering, SVCE, Bangalore during 4th & 5th May 2016.
- Mr Abhishek Chintamani, VIII Sem B.E Civil student secured 2nd prize in the photography event in the 16th VTU Inter Collegiate Youth Festival Chakravyuh 2015-16 held at Alva's Institute of Engg. & Technology, Moodbidri from 7th to 10th May 2016.
- 2015 passed out student, Mr Timir Ranjan (1MV11CV058) secured 3rd rank in VTU exams May/June 2015.
- 2016 passed out student, Mr Pranav.P (USN-1MV12CV038) has been conferred 2016 year's Association of Consulting Civil
 Engineers (India) Bangalore Centre's Student Merit Award, instituted by the Bangalore Centre of Association of Consulting Civil Engineers.
- ♦ The following VII sem students: Anusha. P, Medha, Shadab Khan & Soundarya .S were selected in the campus recruitment conducted by Accenture on 14.10.2016.
- Mr. Ankit Pattnaik, VII Sem B.E Civil student has been nominated as L & T Infotech Ambassador for the year 2016-2017.
- The following VII Sem students, Mr. Vishal Kumar Singh, Mr. Joel Junias, Ms. Soundarya S and Mr. Nadir Hayat participated in the civil fest held at SJBIT, Bangalore and won the Ist place in bridge modelling competition.
- Mr. Pranav .P VIII sem (USN:-1MV12CV038) 2016 B.E Civil Engg. passed out student created history in VTU bagging all the 12 gold medals and also secured University 1st rank in Civil Engineering branch for the Academic Year 2016-17.

Alumni Achievements/ News

The Following alumni are pursuing higher studies:-

- Mr Vijay V , is pursuing PhD in Civil Engineering (Environmental Engineering Specialisation) at IIT, Chennai
- Mr Jayakesh N is pursuing Ph.D at NITK, Suratkal
- Kasu Bhargavi- pursuing her MS in Construction Enga and Management, at Illinois Institute of Technology, Chicago, USA.
- Vivek V pursuing his M S in Construction Engg. and Management, at California State University, Long Beach, USA.
- Kumar Saurabh, Arka Singha, Siddarth Barbhuiya, Hari Om Kumar & Vaibhav Sangwan PG Management in Civil Engineering at NICMAR, Pune.
- Pranav P- MS (Structure Engg.) Texas A & M University, College Station, USA.
- Alluri Nimisha- Master of Project Management, Sydney Australia.

REMARKABLE ACHIEVEMENT......PRANAV.P

Mr. Pranav.P with USN 1MV12CV038, who graduated with B.E. degree in 2016 from Sir M. Visvesvaraya Institute of Technology, Bangalore, secured First rank with 12 gold medals in Civil Engineering from Visvesvaraya Technological University, Belagavi, this year.

Mr. Pranav, is currently pursuing his M.S. in Structural Engineering at Texas A&M University, College Station, US and holds a Graduate Research Assistant position there.

He is the elder son of Sri. Pradeep Kumar.B, who is working as General Manager in a telecom company, and Smt. Sreelatha.S, a homemaker.

Mr. Pranav was awarded best outgoing student by Department of Civil Engineering in the year 2015-16 and was awarded Best merit student award by Association of Consulting Civil Engineers Bangalore chapter award in the year 2016.

He had participated in various competitions in IIT-Bombay, BITS-Pilani, VIT, etc. in model making events, presented 3 papers in international journals and 2 papers in national conferences.

He was presented with the gold medals and certificates in the 16th Annual Convocation held at Belagavi on Saturday ,21st January, 2017 at VTU campus, in which His excellency Governor Sri.Vajubhai Vala, Sri.Basavaraja Raya Reddy, Higher Education minister, Karnataka, Dr. Prem Krishna, former Professor IIT, Roorkee, Vice chancellor of VTU, Dr. Kari Siddappa, and Registrar (VTU) Dr. H.N.Jagannatha Reddy were Guests.









This Amazing Bridge Turns Into a Tunnel and Connects Denmark and Sweden:-<u>The Øresund</u> is an engineering marvel that connects the Danish capital of Copenhagen to the Swedish city of Malmö. A cable-stayed bridge runs nearly 8 km (5 miles) to an artificial island where it transitions into a tunnel that runs another 4 km (2.5 miles). The award-winning double-track railway and motorway opened on July 1, 2000. The Øresund was designed by the Danish engineering firm <u>COWI</u> and the main architect was George K.S. Rotne. The bridge and tunnel run across the Øresund strait and is jointly operated by the neighbouring states from both countries. To use the Øresund you must pay a toll.

CIVIONIX

The word Civionix sure does bring back over 100 students was no cake walk). a lot of memories, doesn't it? . You know, being a Civil engineering student and not having our very own departmental fest was something me and many other students couldn't settle for. But organising a fest is no two man job, so few of us approached other students and together we approached the faculty (Some ten months before the fest), me and my friend had made a hand written draft already, to show it to the faculty. So then after working out all the kinks, by the next semester the date of the fest was announced and many changes were done to the original draft by taking ideas from many civil students, from all the years. Suresh sir and Ramya mam

distributed the fest work between the students as evenly as possible (even then, most of the work was done by them, handling

Just like any other group event, even here there were different opinions , disagreements and arguments between students about various things (Believe me, student meetings were no less than a parliament session). And Just 10 days before the fest there was a lot of pressure on all, making of a fest logo, decorations, fest banners, posters and getting participants from almost all the branches etc had to be done. But on the day of the fest we had well over 200 registrations from students from all the branches, none of the events were cancelled because of lack of participants. And "Go hard or go home" was the most successful event of the fest.

It took well over 100 volunteers and constant guidance from Suresh sir and Ramya mam and the other faculty members, for making CIVIONIX the most successful departmental fest of the year. It was because of the team work, combined efforts of everyone and the WILL to have our very own fest, that an idea of having our fest was constructed into reality.



~ Shadab khan

HOUSE LIFTING TECHNOLOGY

The world is developing at the blink of your eye and development is an unstoppable phenomenon. But, developments are always accompanied by concerns. One of the major concerns in a developing country like India is the sinking of older buildings below the present formation levels. One of the solution for it was to reconstruct the building. But this takes lots of time, money and labour. Now how to over this situation without rebuilding the entire structure? Here comes into play The House Lifting Technology

In the house lifting technology, the building is separated from its foundation temporarily by raising it with hydraulic jacks. This technology can be used in building relocation, foundation improvements or even for enlarging the building with a new floor. This requires high skill and accuracy as even a small flaw can cause cracks over the structure and tends to its collapse. The overall cost of this can vary between \$30,000 to

\$1,00,000 depending upon the size of the structure and foundation conditions.

The house lifting technology is a major breakthrough happened in the recent years that saves lots of labour and time. It is both efficient and economical.



Namma Chinnada Huduga...!!



"Always work on things:

that you are **passionate** about so that you never give up;

that are *challenging* so that you give your best;

that are **tougher** so that you work hard;

that are adventurous so that you explore;

that are *motivating* so that you remain fanatic:

Role of Construction Companies through CSR

Off late there is lot of emphasis been ble housing as part of CSR activity. given on Corporate Social Responsibility both by Corporate and by Government. It basically means "Giving back to society". Even government has made it mandatory to corporate companies to carryout CSR, many of big corporate companies were already doing this great ser-

Now coming to construction industry's contribution to society, I would like to mention here

that this industry is second biggest employer in India next to agriculture. Construction Industry is one of the industries wherein any un-educated, poor, rural, un-skilled person can be employed. There by contributing to society in its development and country by large. The need of the hour for a developing country like us is low cost, affordable housing. I urge all our industry peers to put to lot of innovation in developing the technology to build low cost and afforda-

If a construction company is contributing to CSR cause, I think it is better to

Contribute in the form of building necessary infrastructure instead of contributing financially.

Let us take a case of TCS and Bharti Airtel coming forward to contribute Rs.100 corers each towards

building toilets in schools, if a construction company is contributing towards this, then they themselves build the toilets which will eventually ensure quality.

To conclude, I would ask the readers to share the idea further and to contribute towards the society in form of CSR activity in whatever small way possible.

~Rakshit K.B



Pre-Cast Construction

Chromatophores

Lonesome was it. abandoned. Uncontrolled and wild. My presence made it bloom, Rush out of the crooked darkness. That once used to bustle, explode with a noisy wave, now gave up. Scarlet leaves with a firey shade were now greened.

But I moved away.

Now its again back to same routine. Faces the gale, stands stiff. Moving beyond the pale. No mean was my presence. We were wrecked.

Imagine yourselves moving out of your specific forms and cured on site. The homes in the morning and the very next thing you see when you come back is a multi storied building next to your house. Magical, isn't it? Well, this astonishing erection is possible because of PRECAST construction.

Iscon assembly (Punjab), a 10 storied building constructed in 48hrs! Precast concrete is a construction product produced by casting concrete in a reusable mold or "form" which is then cured in a controlled environment, transported to the construction site and lifted into place. In contrast, standard concrete is poured into site-

question that arises is "why precast and not site cast?" A simple answer to that would be because of its major advantages like quick erection times, possibility of conversion, disassembling, low wastages, low labor intensively and quality &management aspects. The only hurdle that needs attention is its difficulty in transportation and handling due to its large size. In my opinion, the complication issue of transportation can be resolved by better managing the time of their journey. In other words, these must be transported to sites during times when there is lesser vehicular movement during the day causing negligible hindrance to the moving traffic.

~ Ankit Pattnaik





Howrah Bridge is a cantilever bridge that spans over the Hooghly River in West Bengal. The bridge does not have nuts and bolts and was built by riveting the whole structure. . It carries a daily traffic of approximately 100,000 vehicles and possibly more than 150,000 pedestrians, making it one of the busiest cantilever bridges in the world. 26,500 tons of steel was consumed in the construction of Howrah Bridge, out of which 23,000 tons of high-tensile alloy steel, known as Tiscrom, was supplied by Tata Steel. It's our heritage and we should make sure to take care of it..

Bamboo... Is it only a Plant??

Since the time immemorial, bamboo has played an important role in the development of mankind. It has been the back-bone of much of the world's rural life and will remain so as the population increases. Its high valued utilization and availability not only promotes the economic development but also saves forest resources to protect our ecological environment as a wood substitute. It's the world's fastest growing woody plants. Certain species of bamboo can grow 91 cm(3 ft) within a 24-hour period at a rate of almost 4 cm an hour.

The majority of the bamboo construction relates to the rural community needs in the developing countries like India.

Now talking about some of the technical parameters essential for a construction material, it has a high tensile strength since the fibers of the bamboo run axial in the outer zones which are highly elastic vascular bundle. It's a very good fire resistant material because of the high content of silicate acids. The enormous elasticity of a bamboo makes it to a very good building material for earthquake endangered areas. Another advantages of bamboo includes it's low cost, light weight, easily workable and transport.

Freshly cut, bamboo can be bent and will keep this shape after drying. When heated above 150 degree Celsius, bamboo keeps its shape after it gets cold. Bamboo can be used as a foundation, for flooring, as walls and also for roofing. Because of the favorable relationship between load-bearing capacity and weight, bamboo can be used for construction of save scaffoldings even for very tall buildings.

But since every good things comes with a cost, even our material has some disadvantages. The major disadvantage is that bamboo isn't durable. It is subjected to attack by fungi, insects and for this reason the durability of the untreated bamboo structures are viewed as temporary with an expected life of not more than 5 years. Another disadvantages are lack of design codes and the low structural efficiency of jointing techniques used. Bamboo is a good alternate building material with its many advantages and disadvantages which could be overcome in the distant future, if we give it a try..!!



~Vishal Kumar Singh

DRUG ABUSE...

difficult for someone suffering with an addicfor a young person.

And they'll often write off these consequences as other people's problems, not seeing how their own behaviour is a direct result of their substance use. They often say things such as, "Everyone else is doing the same thing", "I haven't been using for that long," or "I can stop whenever I want." Combine false assumptions about addiction and placing blame on parents and other adults — and they have a ready-made excuse to distract them from taking an honest look at themselves and how their substance use is affecting their lives.

Just as teens do, parents have their own images of what someone with a drug problem looks like, and it can be as extreme as the child's view. These preconceived notions help parents stay in denial of a potential problem.

In my view the word "addiction" brings to mind With parents, kids and others sharing this stigdifférent images for different people. It can be ma about addiction, many drug problems slip through the cracks, and that allows for worsttion or potential addiction to identify with the case scenario circumstances to develop when term "addict." And it can be especially trying the warning signs might have been there years

> If you or a loved one has been abusing drugs or alcohol, there is no need to wait until you are absolutely positive there is an addiction present to seek help or to stop using. Addicts are not the only people who benefit when they quit using drugs or drinking.

> Recovery programs for young people offer the chance for teens to identify with others who have similar experiences and stories. And thanks to these programs, many young people who have not crossed the line into addiction have stopped using and found happier, more fulfilling lives without experiencing the severity of long-term addiction.

FACTS...!!

Indian Railways is the largest railways network to be operated by a single government and is the world's third largest network with a total length of 127,760 kms.

The National Highways Network of India is covers 79,243 km of the country including 1000 km of limitedaccess highway or limited-access road. NH 7 is the <u>longest national</u> highway in India with total distance of 4.572 km from Varanasi to

Page 10 ~Medha

Nobel Cause

On 8th Feb, Me and two of my friends the bank made poor people's miserable. had been to IIMB for an event organized by NSRCEL, a startup cell of IIMB. The effort to uplift the economic state of quest of honor for the event was a Nobel Laureate, "Muhammad Yunus" from Bangladesh. He is also one of the Ramon Magsaysay Awardee(1984). The topic of the was hour

"Building Bridges- Social and capital". I would like to share few synopsis of his has the ability to do business provided talk to my readers. Bangladesh witnessed a severe famine and economic downpour in 1976. As a Bangladeshi nationalist, he used to feel depressed af- none of the bank would do. Another inititer returning back from working hours ative was to give loans to women and tarat University of Chittagong. His inability get set was 50%, but today 90% of the seekers as educated person, as a professor or as beneficiaries are women. The repayment economist to contribute for solving ongo- of loans has an efficiency of more than ing problem in his country, intensified in his mind day by day. The worst affected 1983, Grameen Bank was authorized by by this was the poor. Financial exploita- National Legislature of Bangladesh as tion by the higher class people and una- independent bank. vailability of loan for the poor people by

Muhammad Yunus constantly made an farmers. One idea that worked was "The Grameen Bank". It is the only bank in the world which gives loan facility to the poor citizens regardless of one's educational backgrounds. Muhammad Yunus believed that even poorest of the poor he is shown proper direction to use. This micro financing by Yunus has less interest and fewer terms & conditions, which 95% with more than 22k employees. In

My point of interest is not to inform about the history behind, but instead highlight the thought process which he carried out throughout his journey. Many among us would be graduates soon and start earning to make livelihood. Our sole objective shouldn't be to earn money, which many of the colleges, professors or universities are stressing on placements. Eventually it's all about impact which an individual make on society. If this is not taken care off, then we would be producing more and more job than creators. job

~Rakshit K.B

A "GIRL" in Civil Engineering...are you kidding me...???

I really don't know from where to start branch is not normal, You just can't sit room and not to stand outside. When and how to start. So let's keep it very simple. People like you and me. We get fascinated with so many things around us, when we are around 17-18 years old, Civil engineering was one of those things for me. My grandfather and father being civil engineer inspired me even more towards it.

I knew my capabilities and hence decided not to ever think of EEE and ECE. So I ended up taking civil. You know being a girl (and specially being the only north I remember, I went for an internship Indian girl) in the CIVIL BRANCH and with my friend last holidays in my Nacoming 2400 kms away from home to a tive, which is way up in the north. On whole new place, leaving house for the first time. I literally had no idea about the language and culture out here at that time.

So, I started off towards a new journey which seems endless in the beginning. But internals made it easy for me. Seriously the moment you relax after first internal. It seems second internal is waiting with open arms for you. And it continues till semester end exams. Best part of being a girl civil engineering student is you are the odd one out.

My personal experience has been like, Whenever I meet people and they ask me what do I do. and the moment I tell them they get surprised. A girl in this branch or even mechanical sounds like taboo in India even in 21st century. This

inside the class. You have to go out in things like these happens, we don't feel the scorching sun, roast yourself up. Tanning be the part and parcel. In fact you come across jokes like, Your friends from other Dept. say "labour ka kaam sider me trying! . Its disrespectful to kar rhe ho...lage rho". When I look back entire female civil engineers out there. and recollect experiences with my friends and faculties and people over Obviously miss home. But with all these people around the situation gets better.

site work of a bridge was going on.

Not even a single girl was there in 1km radius. Everyone, Every single worker from labour to engineer staring at you, as if you don't belong here. This special "look", was not a new thing for me. I was used to it.

U know that thinking that "what is a girl doing over here?".

Me and my friend we went there. We met senior engineer and the thing he asked repeatedly was for confirmation that I was really in civil branch and the very first thing they asked my friend was numerous questions regarding sfd, bmd and all book stuff and tried to humiliate him. There exact words were "aye man what do u know man... What have u studied...". But all that engineer told me was to go and sit inside in AC

glad that "oh yes, we r getting special treatment". But it is clear that you question my capabilities and don't even con-I'm pretty sure more or less you all girls are goanna face same situations one day here, It has been really tremendous. You or the other. So one piece of advice for you, if people, are treating you this way. It's not even their fault. This is the way we all have been raised. Change in perception and way of acceptance needs time. But this is our time, We can't wait for the change., We can't waste our phase waiting for the correct time, right?.

> Never regret what you opted for, Make best out of it. Genuinely there are limitless perks of being a female civil engineer. It makes u stronger in many ways.... Explore it.. Find yourself... and Stay stud!!

~Medha

Did you know??

The Ancient Romans were the first to develop concrete as a building material . They accomplished this by mixing lime, water and volcanic ash.

SMART PAVEMENTS

In 19th century, Electricity became an essential requirement, from a subject of curiosity in science, which played a major role in the second industrial revolution. Over the past few years, there has been an increasing demand for harvesting power in a more efficient, economic and eco-friendly manner. The process of extraction of energy is currently done through many means, both renewable and non-renewable sources. Innovation and implementation of renewable resources is of major consideration at present. We need a new source of energy which is independent of external space utilization, climatic conditions or geological conditions. Smart materials, especially piezoelectric materials can be used for this purpose.

Piezoelectric materials can convert the kinetic energy. These energies in the ambient mechanical stress impinging over its surface into electrical energy that can be stored and used to power other devices. The concept of piezoelectricity is currently used in industries such as automotive, computer, medical and mili-

Researches are being conducted on pavements with high traffic volume to harvest electricity using piezoelectric materials. When vehicles pass over the road, road deflects vertically. This vertical deflection causes strain and

pavement are wasted as thermal energy, which leads to more risk of pavement damage. A road with piezoelectric material absorbs most of these energies and converts them into electrical energy and reduces the damage.



NEED OF THE HOUR...

INDIA, a name we all aspire to be the spearhead in all fields of development, achievements, setting out bench-marks ,leading initiatives, and being responsible towards domestic as well as global causes and concerns, and to emerge as an epitome of excellency in every desired discipline. The facts are also impressive as we are currently the fastest growing economy among the developing economies across the globe, a promising destination for investments, professionals from India are emerging and earning fame worldwide for example Satya Nadella, Sundar Pichai, Artists like Zubin Mehta, A R Rahman, Nobel prize laureates like Dr Amartya Sen and Mr. Kailash Satyarthi, Top Industrialists like Ambani Brothers, Lakshmi Mittal and the list goes on. Speaking of these aspects will be enough to convince the forth about the "Mettle" of our nation and of course it should do no less.

While spotting all the splendid facts and figures we usually forget to mention (as we do not know) that India has 194 million population starving providing it the top position in World Hunger list, we also stood 130th in HDI (Human Development Index) ranking according to UNDP report 2013 (HDI of India- 0.609 which the right time. Educational institution is below global average i.e., 0.630), literacy rate of 74.04% (way below global average of 86.3%), 276 million people or around 23.6% of population is estimated below poverty line which means they cannot afford \$1.25 on a global index or say Rs 84,GHI(Global Hunger Index) score the hour should be inducted into the of India is 28.5(0 for country with no course so as to improve the dimensions

hunger) which is a serious problem, prevalence of underweight children in India is among the highest in the world, India stood at 143 out of 188 nations in the study of Health Indicator due to its poor performance in hygiene, air pollution mortality rate, malnutrition and undernourishment, diseases like leprosy which is almost eradicated still prevails in India containing almost 90% cases of the world, a prominent resort of epidemics referring through the timeline, and antibiotic resistance has grown so far that we are on the verge of an outbreak. Albeit of all the alluring figures mentioned earlier the question arises as why and where do we lack in addressing these issues which are of greater concern? Where is the epicentre of all these Apart from institutional effort, individuproblems which is still not recognised

ROLE OF EDUCATIONAL INSTITU-TION

INDIA contains the largest youth population in the world. 65% of the population is below 35 years of age which is a significant and an impressive figure. A large part of this population is unaware of predicament which lingered for a long time and will continue to do so if adequate cognizance is not taken into account at can play a substantial role by undertaking approaches to the issues as they are primary exposure to any person. Apart from catering knowledge of concerned discipline an additional subject on humanitarian problem which is the 'need of

of knowledge base of an individual. Focus should be given on personal Capacity building and skill development by increasing the understanding of the issue, comprehensive analysis of the problem, building exhaustive action plan, mitigate the risk factors contributing to problem, addressing the quandary with high efficacy, and building proper plan and infrastructure to avoid recurrence. Female participation should also be encouraged and promoted which is quoted as "Human Development, if not engendered, is endangered" in a human development report submitted in UNGA 1995.

AT INDIVIDUAL LEVEL

al effort is also required. The prejudice of individual incapability should be rectified. Initiatives taken on singular level are more efficient as there is no intermediary organisation or body required to serve the purpose. Volunteer have long been the vital part in bringing real change on the ground. Voluntary action can be enhanced only by tapping into human capital and this mass population can be turned into an advantage in disguise.

It is imperative to acknowledge that we are equal stakeholders along with Government and holding it accountable for every distress is immoral and pointless. A famous saying by Martin Luther King Jr can conclude it well - " If we are to have peace on earth.. our loyalties must transcend our race, tribe, our class, and our nation; and this means we must develop a world perspective".

~Abhishek Kumar

ತಾಯಿ ಮತ್ತು ತಾಯಿನಾಡು

ಸರ್ವರಿಗೂ ನಮಸ್ಕಾರಗಳು,

ನಾವು ಭಾರತೀಯರು, ನಾವುಗಳು ವಿಶಾಲ ಹೃದಯದವರು, ಭಾವೈಕ್ಯತೆಯಲ್ಲಿ ಮಗ್ನರಾಗಿ ತಮ್ಮನ್ನು ತಾವೇ ಅರ್ಪಿಸಿಕೊಂಡು, ಅನುಭವಿಸಿಕೊಂಡು, ಮನದಾಳದಿಂದ "ಜನನಿ ಜನ್ನಭೂಮಿಶ್ಚ ಸ್ವರ್ಗಾದಪಿ ಗರಿಯಸಿ" ಎಂದು ಹೇಳಲು ಸಾಧ್ಯ.

ಪುರಾತನ ಕಾಲದಿಂದಲೂ ನಮ್ಮ ಭಾರತ ದೇಶದಲ್ಲಿ "<u>ಸ್ತ್ರೀಯರಿಗೆ"</u> ಒಂದು ವಿಶೇಷವಾದ ಸ್ಥಾನಮಾನಗಳನ್ನು ಕೊಟ್ಟು ಅವರನ್ನು ಭೂಮಿಗೆ ಹೋಲಿಸಿ "<u>ಭೂತಾಯಿ"</u> ಎನ್ನುತ್ತೇವೆ.. <u>ಜನ್ಮ ನೀಡಿದವರಿಗೆ</u> ಹೆತ್ತ ತಾಯಿ ಎನ್ನುತ್ತೇವೆ.

ಹೌದು ಮೇಲೆ ಹೇಳಿದಂತೆ, ತಾಯಿ ಮತ್ತು ತಾಯಿನಾಡು ಸ್ವರ್ಗಕ್ಕಿಂತಲೂ ಮಿಗಿಲು. ವಾಃ ಎಂತಹ ನೈಜ ಸತ್ಯ. ಜೀವಂತ ಸತ್ಯ. ವಿಶ್ವದ ಅಂತ್ಯದವರೆಗೂ ನಾವು ಎಷ್ಟು ಜನ್ಮಗಳನ್ನೆತ್ತಿದರೂ ಇವರಿವಬ್ಬರ ಋಣ ತೀರಿಸಲು ಆಗದು.......

ತಾಯಿ ತನ್ನ ಗರ್ಭದರಿಸಿದಂದಿನಿಂದ ನಮ್ಮ ಜನನದವರೆಗೂ ಪಡುವ ಸಂಕಷ್ಟಗಳು, ಮಾಡುವ ಸಂಕಲ್ಪಗಳು, ಆರೈಕೆಗಳು, ತಳೆಯುವ ಸಹನೆ, ಪ್ರೀತಿ, ಕಾಳಜಿ, ವಾತ್ಸಲ್ಯ, ಮಮತೆ, ಕರುಣೆಗಳೆಂಬ ಅನೇಕ ಸತ್ವಯುತ ತಾಯಿಯ ಮೌಲ್ಯಗಳನ್ನು ತನ್ನಲ್ಲಿಯೇ ತನ್ನ ಪ್ರೀತಿಯ ಸರ್ವಸ್ವವೂ ಆದ ಕಂದನಿಗೆ ಮುಡುಪಾಗಿಡುತ್ತಾಳೆ. ಅದೇ ರೀತಿ ಹಡೆದ ಕುಮಾರನ ಬದುಕನ್ನು ಸಾಕಾರಗೊಳಿಸಲು, ಆಕೆ, ಆ ಮಹಾತಾಯಿ, ಜನನಿ, ಮಾತೆ, ಅಂಬೆ, ಅಮ್ಮ, ಮಾ, ತನ್ನ ಇಡೀ ಜೀವನವನ್ನು ಮುಡುಪಾಗಿಡುತ್ತಾಳೆ.

ಅಂತೆಯೇ ನಮ್ಮ ನೆಲವನ್ನು ತಾಯಿಗೆ ಹೋಲಿಸಿ, "ತಾಯ್ನಾಡೆಂದು" ಕರೆದು ಪೂಜಿಸುತ್ತೇವೆ. ಇದಕ್ಕೆ ಈ ಮೇಲಿರುವ ಕಾರಣಗಳೇ ಸಾಕ್ಷಿಗಳು. ತಾಯಿ ಮತ್ತು ತಾಯ್ನಾಡಲ್ಲಿ ಸಣ್ಣ ತಾಯಿ ಮತ್ತು ದೊಡ್ಡ ತಾಯಿ ಎಂಬ ಬೇಧವಿಲ್ಲ. ಎಲ್ಲಾ ಒಂದೇ.

ತಾಯಿ ಮತ್ತು ತಾಯ್ನಾಡುಗಳಲ್ಲಿ ಹೋಲಿಕೆಗಳು ಅನುರೂಪವಾದವುಗಳು. ತಾಯಿಯು ತನ್ನ ಮಗುವಿನ ಮೊದಲ ಶ್ವಾಸದಿಂದ ಹಿಡಿದು ತನ್ನ ಕೊನೆಯ ಉಸಿರಿರುವವರೆಗೂ ಕಾಯುತ್ತಾಳೆ. ಜೀವನದ ಮುಖ್ಯ ಹಂತಗಳಾದ ಶೈಲಾವಸ್ಥೆ, ಬಾಲ್ಯಾವಸ್ಥೆ, ಯೌವ್ವನ, ಮುಪ್ಪಿನವರೆಗೂ ಕಾಯುತ್ತಾಳೆ. ಹಾಗೆಯೇ ಭೂಮಿ ತಾಯಿಯೂ ತನ್ನ ಕಂದನ ಮೊದಲ ಉಸಿರಿನಿಂದ ಹಿಡಿದು, ಕೊನೆಯ ಉಸಿರಿನವರೆಗೂ ಕಂದನ ಎಲ್ಲಾ ಸಿಹಿ-ಕಹಿ ಚಟುವಟಿಕೆಗಳನ್ನು ನೋಡಿಕೊಂಡು ಸಹನೆಯಿಂದ ತಡೆದುಕೊಂಡು ಕ್ಷಮಿಸುತ್ತಾ ನಮಗೆ ಬದುಕಲು ಅವಕಾಶ ಕಲ್ಪಿಸಿಕೊಟ್ಟು ಕಾಯುತ್ತಾಳೆ. ಕೊನೆಯುಸಿರೆಳೆದಾಗಲೂ ಸಹ ತನ್ನ ಕಾಲ ಗರ್ಭದಲ್ಲಿ ಸ್ಥಾನ ಕೊಟ್ಟು ದೇಹಕ್ಕೆ ಮುಕ್ತಿ ನೀಡುತ್ತಾಳೆ.

ಹೌದು ಅಂದು ಜನಿಸುವಾಗ ತಾಯಿಯ ಗರ್ಭದಲ್ಲಿ, ಇಂದು ಮರಣ ಹೊಂದಿದ ಮೇಲೆ ತಾಯ್ನಾಡ ತಾಯಿಯ ಕಾಲಗರ್ಭದಲ್ಲಿ. ಆದ್ದರಿಂದ ತಾಯಿ ಮತ್ತು ತಾಯ್ನಾಡು ಅನುರೂಪವಾದ ಹೋಲಿಕೆಗಳು.

ಭೂತಾಯಿ ಎಂದ ಮೇಲೆ ಎಲ್ಲಾ ರಾಷ್ಟ್ರಗಳ, ನಾಡುಗಳ, ಪ್ರಾಂತ್ಯಗಳ ತಾಯಿಯೂ ಒಂದೆ. ಈ ವಿಷಯದಲ್ಲಿ ಭಾರತೀಯರು ಅಂದರೆ ಭಾರತಾಂಬೆಯ ಮತ್ರರು. ನನ್ನ ಬಂಧುಗಳೆ. ಭಾರತಾಂಬೆಯ ಮಡಿಲಲ್ಲಿ ಜನಿಸಿರುವ ನಾವೆಷ್ಟು ಅದೃಷ್ಟವಂತರು. ಈ ತಾಯಿಯ ಮಕ್ಕಳಾದ ನಾವುಗಳು ನಿಜವಾದ ಅಪ್ರತಿಮ ವೀರರು, ದೈರ್ಯವಂತರು, ದೇಶಪ್ರೇಮಿಗಳು. ನಾಡು, ನುಡಿ, ನಡೆ, ಸಂಸ್ಥತಿ

ಪ್ರೇಮಿಗಳು. ವಿವಿಧತೆಯಲ್ಲಿ ಏಕತೆಯನ್ನು ಕಾಣುವ ಸಹಿಷ್ಣುಗಳು, ಸಹನಾವಾದಿಗಳು. ಎಲ್ಲರನ್ನು

ಬಂಧ–ಅನುಬಂಧಗಳಿಂದ, ಬಾಳಿ– ಬಾಳಿಸುವವರು. ಎಲ್ಲರಿಗೂ ಒಳ್ಳೆಯದನ್ನೇ ಬಯಸುವವರು. ಇವುಗಳು ಒಬ್ಬ ನಿಜವಾದ ಭಾರತೀಯ ಪುತ್ರನ ಲಕ್ಷಣಗಳು. ಅವನು ಯಾವುದೇ ಧರ್ಮದವನಾದರೂ, ಅವನು ಮಾತ್ರ ಇವುಗಳನ್ನು ಮನಮುಟ್ಟುವಂತೆ ಅನುಭವಿಸಲು ಸಾಧ್ಯ. ತಾಯಿ ತಾಯ್ನಾಡಿಗೆ ನನ್ನ ಅನನ್ಯ, ಅನೂಹ್ಯ, ಅಗಣಿತ, ಅಗುಣಿತ ಪಣಾಮಗಳು.

ನನ್ನ ಸಹೋದರ–ಸಹೋದರಿಯರೆ, ಬಂಧುಗಳೇ, ತಾಯಿ–ತಾಯ್ನಾಡು ವಿಶ್ವದಲ್ಲೇ ಬೆಲೆ ಕಟ್ಟಲಾಗದ್ದು. ತಾಯಿ–ತಾಯ್ನಾಡಿನ ಅಮೋಘ ತ್ಯಾಗಮಯ ಕಾಣಿಕೆಗಳನ್ನು ಅರಿತು, ಇನ್ನಾದರೂ ಪ್ರೀತಿಸಿಕೊಂಡು (ದೇಶ ಮತ್ತು ತಾಯಿ) ಬೆಳೆಯುತ್ತ, ಬಾಳುತ್ತ, ಸಾರ್ಥಕತೆಗೆ ನಮ್ಮ ಜೀವನವನ್ನು ಅರ್ಪಿಸೋಣ.

> ಜೈ ಅಂಬೆ..... ಜೈ ಭಾರತಾಂಬೆ......

ಜಗತ್ತಿನ ಸರ್ವರನ್ನೂ ತನ್ನ ಮಕ್ಕಳಂತೆ ಕಂಡು ಜೀವನದ ಜಟಕಾ ಬಂಡಿಯಲ್ಲಿ ಉತ್ತಮವಾದ ದಾರಿ ತೋರುತ್ತ ದಾರಿ ದೀಪವಾಗು.

ಜೈ ಭಾರತಾಂಬೆ......

ಲೋಕೇಶ್ ಕೆ ಎಲ ನಾಗರಿಕ ಅಭಿಯಂತರ ವಿಭಾಗ ಸರ್.ಎಂ.ವಿ.ಐ.ಟ ಬೆಂಗಳೂರು

ಶಿಕ್ಷಕ, ಶಿಕ್ಷಕ ನೀನು ರಾಷ್ಟ್ರದ ರಕ್ಷಕ. ಸರ್.ಎಂ.ವಿ.ಐ.ಟಿ. ಯ ನೆಚ್ಚಿನ ಗುರುಗಳಿಗೆ.

The Little Girl :-

For nights she cried alone over and over again in pain and grief.

Her eyes turn red and breath run short as she cried for hours that no one knew about.

On one fine night she stopped and had the courage to let go of those who hurt her.

That night she slept with a smile as her heart was light and the pain was gone.

Yet those people around took her for granted and hurt her again, but she had learned to hide her pain.

She smiled even around them now ,tucking away her pain and grief in plain sight .

No one knew how she was as a person.

No one knew she was in pain.

No one knew all she wanted was a real friend.

No one knew she was fragile and yet strong enough to let go .

And no one knew she was the "LITTLE GIRL WITH THE GOLDEN HEART",,,,,,,,,

~Shadab khan



SOLVE THIS SU-DO-KU

9	4			6	1	3		
2	6	3			4	1		
	1		5	3	2		9	
5	9	8				7		4
4		2				9	5	1
	2		3	1	7		8	
		9	6			2	1	7
		1	2	5			4	3

A Today's Civil Engineering Graduate....

Most students nowadays take up civil engineering because of their family pressure, low rank- didn't get any other branch or just wanted to have an engineering degree but only a few join it out of their shear interest. I am one of them. I used to like drawings since my childhood a lot. I was also curious about tall structres and bridges so my seniors suggested me to take up civil engineering. And here I am in final year of my engineering.

As we all keep on hearing that civil engineers have a very good future, the earn a lot, lots of government job and bla bla!!. Yah it's true. Actually according to recent surveys, the civil engineers are one of the most heighest paid engineers among all.

But nobody knows the other side of it. How difficult it is for a fresher to get even a job paying 15k/month, How they land up doing 9 to 6 in an IT company with no future growth. No core companies coming to college for placements and others which do not visit the campus, asking for 2-3 years of experience.

And trust me guys it feels really horrible when your roommate from an electronics or computer science department grabbing a package of 4-5 lacs and u r simply enjoying their treats.

So there is a clear scenario. No need to rely on any placement or a job. It's well and good if you get one but don't lose hope if u don't get any. Just trust on your engineering background and keep working hard in that field and for sure it will pay you back.

~ Vishal kumar singh

Our Editorial Team!



Vishal Kumar Singh



Shadab Khan



Nadir Hayat



Soundarya S



Medha

Crossword...!!

			2			1		
	3	4	5					
		6						
7								

Down

Across

1. Its weak in tension.

6. A Survey instrument.7. A Binding material.

- 2. This rock has hexagonal shape.
- 3. A fools gold.
- 4. The top surface of the flexible pavement.

 ${\bf 5}.$ A body of permeable rock which can contain or transmit groundwater

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Department Gallery!



















