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*Not just magnitude, but direction also!*

# VECTOR

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A DNA Edu Connect  
Initiative

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## BEST CONNECTIVITY FOR Vidyalankar Wadala Campus



Commuting to college just got more convenient for Vidyalankar (Wadala campus) students with a new BEST bus service (Number 175) being initiated. This new bus covers the route from Vidyalankar College to Rani Laxmibai Chowk, Sion, and it supplements the erstwhile BEST Bus 110 and the metered and share cabs.

Aditya Thackeray, the head of Yuva Sena, inaugurated the service on Saturday, March 3, 2012 surrounded by enthusiastic students. He was later taken on a tour of the Vidyalankar campus. "The college is worth a mention here, as I have no words for it. Fantastic! The interiors, the campus, the hygiene and the facilities provided are truly world class and I am proud that such a college is in Mumbai." were



the sentiments shared by the scion of the Thackeray family as an update on Facebook. He visited the library, the cafeteria and intermingled with students.

The Mayor Shradha Jadhav, BEST President Sunil Shinde, BMC Corporators and local leaders, Vidyalankar Dnyanpeeth Trust Chairperson Mrs. Sanjeevani Deshpande, Trustee Vishwas Deshpande, Vidyalankar students were present for the inaugural. This initiative has been welcomed and well-received by the students.

### Hello Readers!

Examinations are an inherent part of student life, and so are results. In this issue, Vector celebrates the success stories of exam and competition toppers across Vidyalankar. In case you are facing hurdles on your path to success, a gentle reminder: 'tough times don't last, tough people do.' Equanimity in any situation teaches us to learn from every experience that life has to offer so gear up and ensure that you have a wonderful learning experience every single day! And do keep on sending your articles and feedback, as always, on [vector@vidyalankar.org](mailto:vector@vidyalankar.org).

**Meenakshi Nandula**  
Coordinator

### VIT students craft success stories at intra-college Robotics competitions

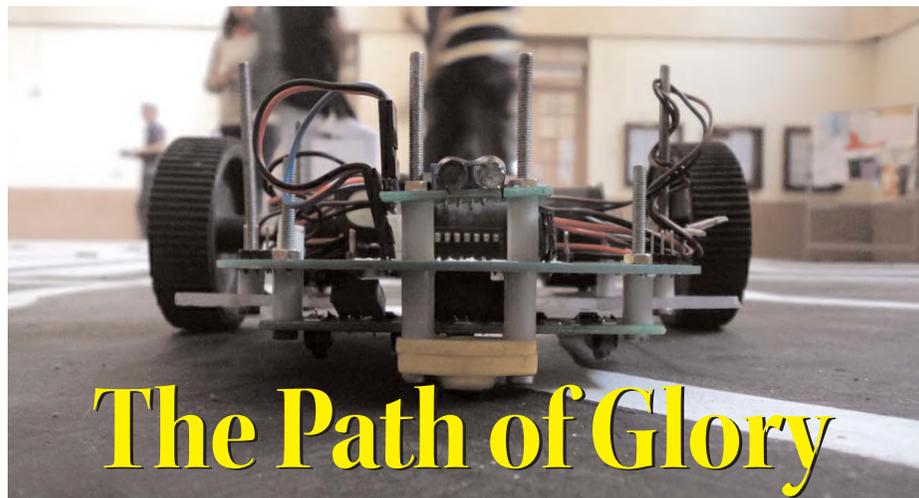
VIT students made waves at WALL-E (Line Follower Robotics Competition at VJTI Technovanza) by bagging all the three top spots! An outstanding clean sweep!

Congratulations to Sanjog Patil, Ritesh Sarode, Ramachandran Iyer and Shubhada Bhat for bagging the first prize; Mandar Rajee, Prashant Bhanke, Gargi Ghurye and Gaurav Bhanke for the second prize and Sanket Patil, Mayur Shivalkar, Rupali Hankare and Namrata Nandakumar for the third prize!

Read on for a firsthand account of the amazing journey dotted with victorious milestones all the way.

"Welcome to the world of Autonomous Robotics!" were the first words that kicked off our Robotics journey. It all began from a workshop on Swarm Robotics in our Second Year. We were supposed to build a Line Follower Robot which would be completely Autonomous or in simple words, one that would have its own brain. I, along with my team - Prashant Bhanke, Gargi Ghurye, Dnyaneshwar Shingade and Gaurav Bhanke were highly enthusiastic and were eagerly awaiting that one moment which would give us a foothold for an entry into this field. The workshop gave us a proper foundation and we also needed something to trigger our potential.

With our base secured and led by our dreams for the future, we set on a relentless quest to capture the Line Follower Robotics crown of the University of Mumbai. Almost every college had an event based on the concept of a Line Follower Robot in their respective tech fests. We were still amateurs, but fuelled by high hopes, we directly set out for our first competition at PRAXIS-VESIT. The outcome was a highly disappointing one. Even after a defeat we did not change our execution methods and we took on an even bigger challenge at VJTI. This was a place where we got our first token of appreciation but still it was not a winning one.



These two events made us realize that something needed to be changed seriously to make us stand out from the rest. It was time to put 'theory to practice'. Application of our academic knowledge proved to be the magic solution. The applications of Auto-Cad for perfecting the compactness of the hardware of our robot, and Digital Logic Design and Control Systems for unbeatable algorithms were some of the tricks we pulled off our sleeves. This transformed us into a competitive team, with our basics right, and our visions set on victory.

Loaded with the ammunition of knowledge, we began on home soil and it was FERVOR at VIT where we achieved our first victory. It was a dream to make our home campus an unassailable fortress for teams from other colleges. We returned to PRAXIS after a year but this time many things had changed. We were positioned second and we had crafted a remarkable turnaround.

NEXUS-IIT BOMBAY was an international event for Autonomous Robotics. While preparing for this elite competition we faced many hurdles but we always had our highly qualified faculty members to guide us. We, being from the Electronics and Telecommunications background lacked a bit in programming skills. The



faculty members were highly helpful in providing us expert tips. Also our mentors - our seniors provided their constant support for the same. We didn't turn up winning that event, but the sheer feeling of participation and the efforts that we put in gave us a lot of confidence to stand out from our peers.

At Whizon-RAIT we won two events crushing the competition around. Also following that win was an unforgettable victory at ISAAC-TSEC where many participants backed out after having a look at the prototype of the actual track. We were highly successful and I rate this as our best performance because of the sheer elegance of our robot executing the right result for us. Our college acknowledged and appreci-

ated our victories and we were permitted to use the labs and to practice in the college premises after college hours.

Armed with all this background preparation, we recently won top honours at VJTI. As we had anticipated, the competition was challenging as well as stimulating. We were there with 50 other competitive teams registered for the event. The event was split up in two rounds with both the rounds having separate tracks. Round 1 was a normal beat the clock kind of round, which is generally associated with Line Follower Robotic events. Unconventionally, they used green colour which was uncommon in Line Follower tracks as the normally used colours are either black or white. This round was a mass elimination round as they were going to shortlist only the Top 16 teams for Round 2. We eased through this round and an even more satisfying feeling was that all 6 teams from VIT made it through to the next round!

The track for Round 2 of this event was a well-thought out one and it had the thrill of a one on one competition as it was two bots at a time and the one which finishes first wins. The round involved a beautiful blend of Line Following + Obstacle (WALL) avoiding, hence the name WALL-E. This track was divided into two halves with both parts being mirror images of each other. There were teams coming from various colleges such as D.J. Sanghvi, VESIT, RAIT and even VJTI itself. Beating all teams aside, the VIT parade marched on and we faced off with our classmates in the Top 3 battle. Our bot finished second but the feeling was a great one as it was VIT supremacy ruling over all the other colleges.

For participating on a bigger platform, one needs great confidence, self belief, inspiration and practice. As a result today, we have the top three teams winning at VJTI - all from VIT. This is a feeling that me and my team-mates would cherish for a long time. We hope to see our juniors recreating these achievements with a new flare and flamboyance of their own. After all, the torch of victory needs to be passed forward and it has to be held up high by us VITians!

**Mandar Rajee**  
(TE-EXTC 1, VIT)

# The Global Engineer

The Global Engineer is one who has the ability to live and work in a global community, an important requirement for engineering graduates. They need to have broad engineering skills and know-how, be flexible and mobile, and be able to work internationally. Industries should also play a greater supportive role. Over the last decade, an increasing awareness has developed across engineering and technology of the need to recognize that the practice of engineering increasingly transcends national and cultural boundaries. Engineering programs worldwide have responded to the task of educating students for a global workplace and international networks of knowledge in different ways. The Global Engineer is technically adept, broadly knowledgeable, innovative and entrepreneurial, commercially savvy, multilingual, culturally aware, knowledgeable about world markets, professionally flexible and mobile.

Increasingly, industries are demanding graduates who can function successfully in global environments without causing major intercultural misunderstandings.

More opportunities for students to be involved in global teams, projects, and designs are needed from industry, either through on-campus experiences, such as research and educational projects or case studies, or off-campus internships. Industry can support faculty members and student mobility by providing greater financial support, employment opportunities, and of course research projects. Professional engineering organizations should collaborate more across the borders; they should work to strengthen the dialogue between professional practice and academia; they should help define and monitor global engineering qualifications.

The achievement of the competence in the context of global aspects introduces an even greater challenge, particularly at undergraduate levels, where educators will need to innovate and be prepared to support students in learning environments globally which, in turn, will mean redesigning the programmes to facilitate developments in a global context. For emotional intelligence (EI) to be successfully achieved, educators need to be prepared to introduce it, and sustain it, from the

start of an undergraduate programme through to the postgraduate level such that graduates enter their careers, knowing they have an established base of EI alongside their discipline knowledge and other core competencies. Components such as empathy, social responsibility, interpersonal relationships and Emotional Self Awareness should significantly contribute to effective professional practice in global based environments.

Powerful and portable communication and collaboration technologies are transforming the educational environment. They are eliminating much of the "memory" work in education and are providing more time for analysis, synthesis, and creativity. Many institutions are recognizing the pedagogical value of learning experiences beyond the formal curriculum. Cooperative education, internships, research experiences, service learning, study abroad, and similar experiential programs provide students with opportunities to better connect the theory and practice of their fields.

(References from [www.global-engineering-excellence.org/study-order](http://www.global-engineering-excellence.org/study-order) and an article on Emotional Intelligence from the internet.)

Prof. Seema Shah  
Principal (Actg), VIT



Prof. Seema Shah  
Principal (Acting), VIT

## An online survey reveals one's personality according to one's Blood Group! Read on...

	BLOOD GROUP O	BLOOD GROUP A	BLOOD GROUP B	BLOOD GROUP AB
<b>In a nutshell</b>	Cannot stand people who hide the truth	Pessimistic and too sensitive	Cannot take orders easily	Romantic and sentimental
<b>Basic Behavior</b>	Make objectives clear	Careful about decision-making	Make decisions fast	Extremely practical
	Possess great deal of confidence	Make things clear in black and white	Can be flexible	Excellent in analyses
	Honest, optimistic and energetic	Care too much about social rules and standards	Do not care about rules	Give fair criticisms
<b>Tolerance</b>	Strength and endurance depend on their aim	High tolerance for physical or repetitive work	Respect scientific and practical findings	Cannot decide when it comes to important issues
	Give up easily if they find the job meaningless	Cannot take changes easily	Maintain the longest interest in what they do	Try to be hard-working
<b>How do they express their emotions?</b>	Usually stable and calm	Lose interest in a hobby easily	Dislike repetitious work	Tend to be impatient
	Sensitive towards sincerity	Able to display cool outlook even though angry	Expressive	Sentimental
	Give frank, direct opinions	Short-tempered	Cool and objective	Usually cool and steady, but can get upset with an immediate, unsolved problem
	Sensitive to others' opinions	Take longer to heal a broken heart	Although joke a lot, could actually be very shy	Can get moody easily
<b>How do they work?</b>	Ability to concentrate vary from time to time, depending on aim	Cannot stop complaining when they are upset	Creative and possess new ideas	Able to handle a wide scope of jobs
	Mostly prefer to lead	Perfectionist	Cannot differentiate between work and hobby	Value hard work

Anjum Mujawar, Faculty, VP

## Toppers from Vidyalankar Polytechnic



**Aarti Ithape**  
5th Sem  
Computer = 83.10%  
Java = 91



**Arunkumar Singh**  
5th Sem  
computer = 83.35%  
Java = 92



**Aishwarya Karnik**  
5th Sem  
EXTC=90.67%



**Siddhesh Rahulla**  
5th Sem  
EXTC= 90.33%



**Pratik Meher**  
1st Sem  
IT=85%



**Ashwini Jaitapkar**  
1st Sem  
Highest in Chemistry (CO2E)= 99



**Shailendra Torane**  
1st Sem  
Chemistry (CO2E) = 94

## Toppers from Vidyalankar School of Information Technology

### T.Y.B.Sc (IT) SEM V Result Ranks (October 2011)

<b>Rank I</b>	574/750 <b>Goyal Ashwin Subhash</b> 76.53%	<b>Rank IX</b>	538/750 <b>Date Chaitali Milind</b> 71.73%
<b>Rank II</b>	568/750 <b>Bane Asmita Arun</b> 75.73%	<b>Rank X</b>	535/750 <b>Kothawle Renuka Suhas</b> 71.33%
<b>Rank III</b>	565/750 <b>Aishwaryadevi Suthandirarajan Kannaki</b> 75.33%	<b>Internet Security</b>	124/150 <b>Chavare Manisha Mahadev</b> 82.66%
<b>Rank III</b>	565/750 <b>Shaikh Tabassum Mohd. Shafia</b> 75.33%	<b>Internet Security</b>	124/150 <b>Alle Pradip Shankar</b> 82.66%
<b>Rank IV</b>	558/750 <b>Ansari Mohd. Arif Mohd.Ahmed</b> 74.40%	<b>Visual Basic 6</b>	131/150 <b>Ansari Mohd. Arif Mohd. Ahmed</b> 87.33%
<b>Rank IV</b>	558/750 <b>Khimavat Dhawal Rameshkumar</b> 74.40%	<b>SQL 2</b>	125/150 <b>Bane Asmita Arun</b> 83.33%
<b>Rank V</b>	549/750 <b>Kondgekar Vrushali Sunil</b> 73.20%	<b>Advanced Java</b>	132/150 <b>Bhat Aditi Arvind</b> 88.00%
<b>Rank VI</b>	545/750 <b>Khan Zeba Sultan</b> 72.66%	<b>Embedded Systems</b>	119/150 <b>Aishwaryadevi Suthandirarajan Kannaki</b> 79.33%
<b>Rank VII</b>	542/750 <b>Joshi Nidhi Jagdish</b> 72.26%	<b>Embedded Systems</b>	119/150 <b>Bane Asmita Arun</b> 79.33%
<b>Rank VIII</b>	539/750 <b>Kadam Gauri Krishnakant</b> 71.86%	<b>Web Design</b>	121/150 <b>Khan Zeba Sultan</b> 80.66%
<b>Rank IX</b>	538/750 <b>Sawant Shrutika Sudhakar</b> 71.73%	<b>ERP Systems</b>	121/150 <b>Khan Zeba Sultan</b> 80.66%

## Make Your Career Shine with Competitive Entrance Exams

**H**ave you planned your career path? No? Don't delay any more, you need to plan now! What next after graduation? In the previous issues of Vector, we had focused on "The Need of Post Graduation"; in continuation to that I would like to share the observation amongst hundreds of students - what is the 'right time' and the 'right strategy' to go about achieving your goal? If you are in your pre-final year it is the right time for you to start thinking about putting your plans to action.

Appearing for competitive post graduation entrance exams is the only way to achieve your long-term goals. Many Public Sector Units such as NTPC, BHEL, BARC etc. need a valid GATE score. If you want to get into the field of Management, CAT / CMAT is the way to get into prestigious B-Schools. GATE tests you for technical knowledge and a personal interview, if you wish to procure admission into institutes like IITs, NITs etc. Good B-Schools such as IIMs and XLRI will tests you for aptitude tests, group discussions and personal interview.

The first test in case of all competitive entrance exams like GATE/CAT/CMAT is the elimination round. GATE/CAT/CMAT etc will gauge your Technical Knowledge, Verbal Ability, Quantitative Ability, Reasoning Ability / Data Interpretation and General Awareness through these tests.

The second step in case of GATE is a personal technical interview whereas in case of B-Schools after aptitude tests, the second round is a group discussion round. GD is a comprehensive tool to judge a student and one's appropriateness for the job or the course. An evaluator will judge your communication and in-



terpersonal skills along with the subject knowledge during the GD. One should be able to manage one's emotions, get noticed for the right reasons, listen carefully to others and should contribute meaningfully to the team's success while discussing.

After a GD, one needs to gear up and focus on Personal Interviews as this is the final round of selection. An interviewer will always analyze and focus on rational thinking. In any interview one is appraised on one's critical thinking ability, personality and character, ability to

handle difficult situations, communication and leadership skills.

Preparing for any entrance exams like GATE/CAT/CMAT etc. helps you to inculcate analytical and logical thinking abilities which in turn help you to crack placement aptitude tests. So, if you are preparing for entrance exams like GATE/CAT/CMAT you are in a way getting yourself ready to face and surpass others in campus placements as well.

–Sacheta Aneja  
Vidyalankar

## We Care



### Arrest those time stealers!

- Social networking sites have their productive uses such as catching up with friends and ex- classmates, socializing with family and friends. But if you're gossiping, snooping out of boredom, obsessing over old friends or partners, you are wasting your time.
- If you are using your cell phone to communicate with friends and family, to call to manage emergencies, or using the entertainment features during leisure time, you are putting your phone to productive uses. If you are addicted to texting, using your phone as a camera all the time, checking Facebook when in class or in conversation with others, it's a time stealer.
- The ability to say "no" to be involved in unproductive, unplanned activities (such as chatting, video gaming or a sudden movie outing) teaches you to be assertive and ensures that you honour your schedule.
- Don't procrastinate or wait until the last moment to get started on your tasks. Space things out so you manage your time and workload in a steady flow instead of one gigantic wave at the eleventh hour.
- Good time management often requires the ability to prioritize and reprioritize constantly as things come up. And having good time management skills also means that, when things shift around, you'll be able to deal with it instead of suddenly finding yourself in a crisis.

## Champs from Vidyalankar Classes

### B.Sc.(IT) (Semester 5) Toppers in December 2011



Zalpa Rathod (VB-80)



Aditi Bhat (Adv Java-83)



Ashish Pawar (IS-80)



Nikita Parab (WD-83)

### DIPLOMA TOPPERS The 100% Club!



Darshit Nathani

Has scored a Hat Trick  
in Maths!

100/100 in Sem III  
Dec 2011

100/100 in Sem II  
May 2011

100/100 in Sem I  
Dec 2010



Aishwarya Sawant  
Maths I- 100/100



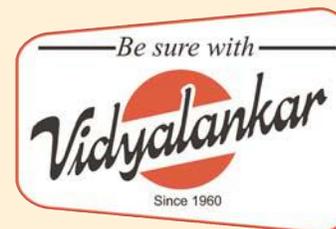
Abhishek Pandey  
Maths I -100/100



Bhushan Warang  
Maths I-100/100



Havan Somaiya  
Maths I-100/100



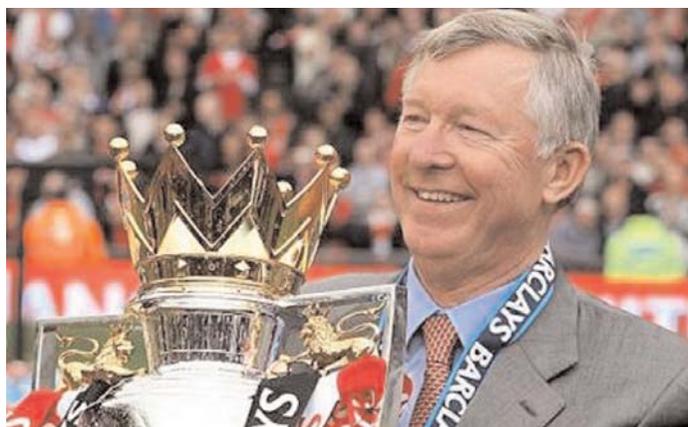
Varad Pandit  
Physics -100/100

'Theatre of Dreams' is a phrase every football lover knows and understands what that theatre has to offer every time you see a show there. Manchester United is perhaps the biggest club in football today. Founded as Newton Heath LYR Football Club in 1878, the club changed its name to Manchester United in 1902 and moved to Old Trafford in 1910. Since then they have grown into a massive club. They have had their share of ups and downs like any other team. In Munich (1958) a tragic air crash consumed the lives of eight united players. The phrase 'rising from the ashes' took a whole new meaning, when in 1968, under the management of Sir Matt Busby, United became the first English football club to win a European cup.

In 1992 when the Premier League started in Britain, United had only seven domestic titles to their name. In the last 20 years they added 12 more, winning the League a record 19 times. 'Man U' have 11 FA Cups, four League Cups and 19 FA Community Shields to their credit. The club has also claimed victory over three European Cups, one UEFA Cup Winners' Cup, one UEFA Super Cup, one Intercontinental Cup and one FIFA Club World Cup. In 1998-99, the Club won a "Treble" of the Premier League, the FA Cup and the UEFA Champions League, an unprecedented feat for any English club.

The Red Devils of Man Utd have

## Devil's Rule



had some of the footballing world's biggest stars in their line ups. Modern greats such as Roy Keane, Eric Cantona, Peter Schmeichel, Ole Gunnar Solskjær, Edwin van der Sar were some of the foreign players who have helped create the brand Manchester United. The

Club has an excellent youth training program and the class of 92, which produced greats like David Beckham, Paul Scholes, Gary Neville and Nicky Butt, is a testament to that. Ryan Giggs who was just a 16 year old boy in 1991 has now more than 900 appearances

donning Man U colours and has scored in every Premier League season since 1992. Utd have always had great players in their side and when one left the club, someone else would take up the mantle. David Beckham, Ruud van Nistelrooy, Cristiano Ronaldo and now Wayne Rooney are perfect examples of the flamboyance Utd is famed for.

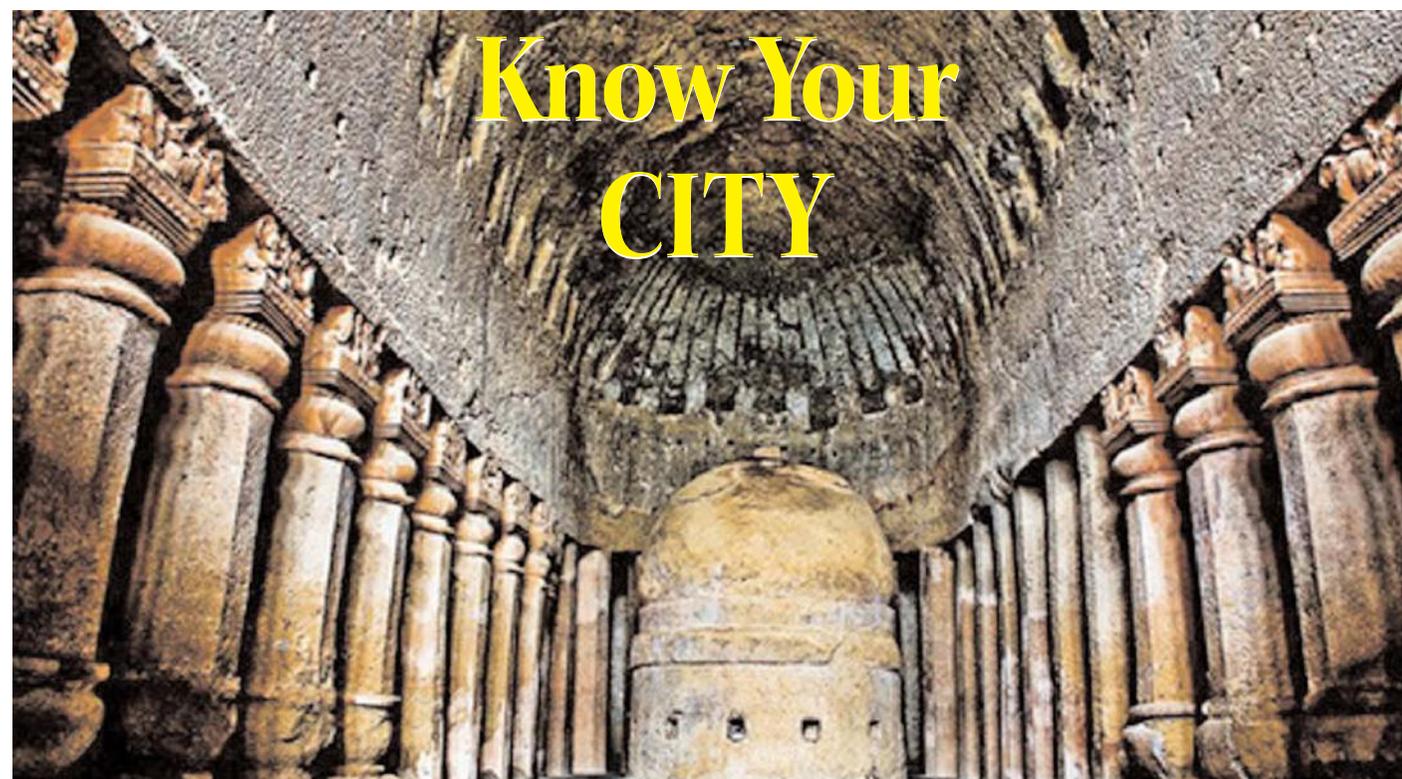
"Alex Ferguson is the best manager I've ever had at this level," says David Beckham when asked about the man in charge of Utd for the last 25 Years. Sir Alex Ferguson has to be one of the greatest managers in footballing history. He has been at Utd since 1986 and has been the primary driving force and the reason behind Utd's admirable trophy cabinet. Manchester United is currently owned by the Glazer family. The Americans bought the club in 2005 amidst a lot of controversy around the debt the Club was being plunged into. This also has not slowed down United's juggernaut. Since the 2006 - 2007 seasons, Utd have bagged four out of five premier leagues. Over the years Man Utd has had great rivalries like any other sporting contest. Even today a Man Utd Vs Liverpool match is a mouth-watering contest. With Manchester City's rise as a powerhouse, Utd have to play their best to win the Premier League this season so that Old Trafford again sings "Glory Glory Manchester United!"



## GUESS WHO?!

Do you know who the person in the picture is? Mail us your response on [vector@vidyalankar.org](mailto:vector@vidyalankar.org), and you could be the winner of an exciting prize!

The correct answer to "Guess Who?!" in Vector, February issue is Azim Premji, the chairman of Wipro Ltd., one of India's leading software companies. Forbes ranks him as currently the third wealthiest Indian, and the 41st richest in the world, with a personal wealth of US\$15.9 billion in 2012. Thank you readers for all your responses and congratulations to **Mitesh V. Naik**, the lucky winner of the contest!



## Know Your CITY

The Kanheri Caves are a group of rock-cut monuments, located north of Borivali on the western outskirts of Mumbai, deep within the green forests of the Sanjay Gandhi National Park. Kanheri is credited with the largest number of cave excavations in a single hill; in all, 109 caves have been chiselled and carved out of a massive basaltic rock outcropping. These caves date from the first century BC to the tenth century AD.

The larger caves were halls for congregational worship and are lined with intricately carved Buddhist sculptures, reliefs and pillars, and contain rock-cut stupas. Farther up the hill are the remains of an ancient water system, canals and cisterns that collected and channelled the rainwater into huge tanks. Most of the caves are the Buddhist viharas meant for living, study, and meditation. A University centre by the time the area was under the rule of the Mauryan and Kushan empires, nearly 51 legible inscriptions and 26 epigraphs are found at Kanheri.



## Aptitude Corner

**Q 1.** A man travels 2 km towards North; then he turns to South East and travels 1 ½ km. Then he makes a bee line towards his starting point. In which direction would he be traveling?

- a) South-East                      b) South-East  
c) East                                d) West

**Q 2.** Happiness is ultimately a state of mind. Most of the time, we are unhappy not because that some evil has befallen on us, but by the absence of some fictitious good.

The implication of the above statement is that:

- a) We are unhappy because we are discontented with our lot, however good it really is.  
b) We are unhappy, because we always compare ourselves with others better off than us.  
c) We are unhappy, because something which we think good has not happened to us.

**Q 3.** A shopkeeper professes to sell all things at a discount of 10%, but increases the S.P. of each article by 20%. His gain on each article is:

- a) 6 %                                b) 8%                                c) 10%                                d) 12%

**Q 4.** Gold is 19 times as heavy as water and copper is 9 times as heavy as water. In what ratio should these be mixed to get an alloy 15 times as heavy as water?

- a) 1 : 1                                b) 2 : 3                                c) 1 : 2                                d) 3 : 2