



# The Editorial Board

*-Beckoning Creati'wit'y*



presents

# TIRESIA

*Colours of Malaviya*

*"Work hard in silence, let your success be your noise."*

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**Tete-a-Tete**

*with*

**Sneha Gupta**

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## Message from The Editorial Board

With the winter indolence thawing away, rejuvenated Malaviyans stride to conquer the challenges ahead with breathtaking panache. Spring is here and nature, like a mother, welcomes it as her newborn child, taking its first breath in the world.

**The Editorial Board** gratified the youth with a bequest of **SpellCzar 2016**, providing a canvass to blazon their spelling skills. Every corner of the campus emanates petrichor, revitalizing the Malaviyans. The past month witnessed a plethora of events like Explora, Robomania, etc. The coming month will bring events like Udgaar and Abhivyakti after a coon's age, giving students a voyage into the sea of fun and enjoyment. **The Editorial Board** brings forth this issue of **Tiresia** to wish all the students a streak of luck for the upcoming challenges.

## FROM VICE CHANCELLOR'S DESK

I am pleased to note that the Literary Sub-Council of Council of Student Activities of University is coming out with **Tiresia** - the University's news letter for the month of March in academic session 2015-16.

Presently, the even semester activities of this academic session are progressing ahead for timely completion of session in May 2016. I understand that the teaching-learning processes are being carried with full responsibility and commitment by all concerned in the prescribed framework, and it should lead to perceptible improvement in the quality of education in the University. I have observed that in spite of all encouragement and facilitation, all the students are not undertaking the challenge of improving themselves through their active participation in curricular and extracurricular activities in the University campus.

It is important to underline that like every educational Institution, this University has also aimed for becoming an important centre of higher technical education, but the goals set forth cannot be achieved without whole hearted involvement of all concerned. Therefore, I wish to call upon all the stakeholders in the University to come forward for improving the quality and standard of education in it.

Further, I extend my best wishes for happy and colourful Holi ahead to all readers of **Tiresia** and congratulate the members of **The Editorial Board** for their endeavour to publish the present edition of **Tiresia**.

*“Have faith in yourselves, and stand up on that faith and be strong; that is what we need”*

– Swami Vivekanand

Jai Hind

**Prof. Onkar Singh**

### **FROM CHIEF EDITOR’S PEN**

I feel extremely delighted to share with the readers, the release of the fifth issue of the monthly newsletter, **Tiresia**, in March 2016, at our university portal in the shade of a young, experienced, dynamic, visionary and scholarly Vice Chancellor Prof. Onkar Singh. **Tiresia**, the monthly newsletter of the University, unlike playing the role of a sheer spectator and reporter, speaks the language of the University, connecting the stake holders, communicating with them and inviting them to be an inseparable part of the University. It tries to establish a close bond between the old scholars and the new learners by offering them to share their experiences, provide their invaluable suggestions and extend their support in making and escalating the University to an echelon where from, perforce, each and every one reflects and gravitates the world to its reputation.

**Dr. Arjun Dubey**

# Tête-à-Tête

With

**Sneha Gupta**



Mrs. Sneha Gupta, an eminent personality, is an alumnus of Madan Mohan Malaviya Engineering College. She is a pass out of 2011 batch and has pursued B.E. in Civil Engineering from Madan Mohan Malaviya Engineering College and M.Tech. from MNNIT Allahabad. Presently she is pursuing her Ph.D. from MNNIT Allahabad and is also working as an Assistant Professor in Civil Engineering Department in MMMUT. She was an active member of **The Editorial Board**. We had the privilege to interview her. Here is an excerpt from what she had to say.

**Q1: Ma'am , please describe your career till date in brief.**

**Ans:** I joined MNNIT Allahabad to pursue M.Tech after completing my B.E. in June, 2011. My dedication towards studies gave me the opportunity to complete my Ph.D. from the same institute. Presently I am working as an Assistant Professor in Civil Engineering Department of MMMUT, Gorakhpur.

**Q2: Ma'am , please describe your life post Malaviya.**

**Ans:** Life post Malaviya was again under study and struggle because my ambition was to become a professor in a reputed government engineering institution. So, I pursued for higher studies. During the meantime, I attended many national and international conferences along with various industrial tours covering Nagpur, Mumbai, Ahmedabad, Delhi and several other regions.

**Q3: How would you describe your college life?**

**Ans:** College life was good. Teachers were quite supportive and interactive. In the first year, the classes of Civil and Mechanical Engineering were combined. At that time we were only 30 students in Civil Engineering and around 35 in Mechanical. Beside studies, we enjoyed late night birthday celebrations in hostels, spent hours with friends at maggi point, participated in fests organized by our college authorities, etc. I was a member of **The Editorial Board** which helped me to gain experiences of organising different programmes. Placement in our department was not good at that time, few companies visited for the placement and L&T was one of them. I also cleared the SSC examination during my M.Tech. studies. Since my ambition was different, I did not opt for that job .

**Q4: Is there any memorable incident from your Malaviyan times? If yes, please share it with us.**

**Ans:** Four years is a long time. Many memorable incidents are there from that time. One such happened when I was in the final year, it was our farewell function which was organized in Multi-purpose hall for the first time. On the same day the farewell for the members of **The Editorial Board** was also organized. We enjoyed a lot but at the same time were feeling sad for leaving our college in which we spent a very precious period of our lives.

**Q5: What is your success secret?**

**Ans:** For whatever I am and whatever I will be, I will always owe it to my parents, husband and to all those who have always motivated me. Hard work and continuous motivation are the steps to success.

**Q6: What message would you like to convey to the budding engineers of the Malaviya?**

**Ans:** Malaviyans always shine wherever they stand and I wish this legacy is maintained. I would like to say to all budding Malaviyans to stay focussed on their objectives and work hard to achieve the same. They should remember never to give up over any challenges put in front of them. Try to gain experiences from your failures. Involve yourselves in extracurricular activities since there is a world beyond books. At last, best wishes to all the Malaviyans for their bright future.

# Campus Buzz



- Convention on **Green Energy For Sustainable Development** was organized by the university.
- A spectacular array of exciting, action packed Martial Arts show and inter year **Kabaddi** tournament was held on January 26 , 2016.
- The university initiated a mission on **Green Campus, Clean Campus** on January 1, 2016.
- The University hosted a **National Level Kabaddi Tournament** in the campus on February 20, 2016 and February 21, 2016.
- **Annual Sports meet** of the university was held on February 20, 2016.
- **Robomania** -A National Level Symposium was organized by the Robotics Club of the university from February 26, 2016 to February 28, 2016.



# TECH*in*SIGHTS



Here is the set of questions for this month's competition.  
Mail the answers at [literaryedb@mmmut.ac.in](mailto:literaryedb@mmmut.ac.in)

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## COMPUTER SCIENCE AND ENGINEERING

Consider the pseudocode given below. The function Dosomething () takes as argument a pointer to the root of an arbitrary tree represented by the leftMostChild-rightSibling representation. Each node of the tree is of type treeNode.

```
typedef struct treeNode* treeptr;
Struct treeNode
{
    Treeptr leftMostchild, rightSibling;
};
Int Dosomething (treeptr tree)
{
    int value =0;
    if (tree != NULL)
    {
        if (tree -> leftMostchild == NULL)
            else
            value = Dosomething (tree->leftMostchild);
            value = value + Dosometimeg (tree->rightsibling);
        }
    }
return (value);
}
```

When the pointer to the root of a tree is passed as the argument to DoSomething, the value returned by the function corresponds to what?

## ELECTRICAL ENGINEERING

A 110V dc shunt generator delivers a load current of 50A. The armature resistance is 0.2ohm and the field circuit resistance is 55 ohm. The generator, rotating at a speed of 1800 r.p.m, has 6 poles, lap wound and a total of 360 conductors. Calculate the no- load voltage at the armature and the flux per pole.

## ELECTRONICS AND COMMUNICATION ENGINEERING

The voltage gain of an amplifier without feedback and with negative feedback respectively are 100 and 20. The percentage of negative feedback would be how much?

### **CIVIL ENGINEERING**

Determine the distribution of shear stress in the flangs of the Z-section when the plane of loading is vertical.

### **MECHANICAL ENGINEERING**

Why there is no differential in the train? What happens when a train takes a turn?

### **WINNERS OF LAST EDITION :**

#### **COMPUTER SCIENCE AND ENGINEERING**

Shailendra Singh, Third Year

#### **MECHANICAL ENGINEERING**

Devesh Kumar Chaturvedi

#### **ELECTRONICS AND COMMUNICATION ENGINEERING**

Saurabh Maheshwari, Final Year

No satisfactory answers from Civil Engineering and Electrical Engineering.



## DISCOVERY OF THE CENTURY

For the first time, (in February 2016) scientists have observed ripples in the fabric of spacetime called gravitational waves, arriving on the earth from a cataclysmic event in the distant universe. This confirms a major prediction of Albert Einstein's 1915 general Theory of Relativity and opens an unprecedented new window onto the cosmos.

Today, we are on the edge of a new frontier in astronomy: gravitational wave astronomy. With the United States' gravitational wave detector (LIGO) and its international partners, we are preparing to see the universe with a new set of eyes that do not depend on light. Gravitational waves carry information about their dramatic origins and about the nature of gravity that cannot otherwise be obtained. Physicists have concluded that the detected gravitational waves were produced during the final fraction of a second of the merger of two black holes to produce a single, more massive spinning black hole. This collision of two black holes had been predicted but never observed.

Based on the observed signals, LIGO scientists estimate that the black holes for this event were about 29 and 36 times the mass of the sun, and the event took place 1.3 billion years ago. About 3 times the mass of the sun was converted into gravitational waves in a fraction of a second—with a peak power output about 50 times that of the whole visible universe. By looking at the time of arrival of the signals—the detector in Livingston recorded the event 7 milliseconds before the detector in Hanford—scientists can say that the source was located in the Southern Hemisphere.

The new LIGO discovery is the first observation of gravitational waves themselves, made by measuring the tiny disturbances the waves make to space and time as they pass through the earth.

“Our observation of gravitational waves accomplishes an ambitious goal set out over 5 decades ago to directly detect this elusive phenomenon and better understand the universe, and, fittingly, fulfills Einstein's legacy on the 100th anniversary of his general theory of relativity,” says Caltech's David H. Reitze, executive director of the LIGO Laboratory.

## STUDENT MEMBERS

### FINAL YEAR

Adarsh Chaudhary  
Aishwarya Chauhan  
Asmita Pal  
Divi Khare  
Mudit Saxena  
Pragya Pandey  
Rajesh Kumar Ojha  
Ritika Gera  
Saurabh Dubey  
Shweta Srivastava  
Sonali Mishra  
Vijaya Laxmi Acharya  
Vishal Sharma

Toward this end, the LIGO Laboratory is working closely with scientists in India at the Inter-University Centre for Astronomy and Astrophysics, the Raja Ramanna Centre for Advanced Technology, and the Institute for Plasma to establish a third Advanced LIGO detector on the Indian subcontinent. Awaiting approval by the government of India, it could be operational early in the next decade. The additional detector will greatly improve the ability of the global detector network to localize gravitational-wave sources.

## **STUDENT MEMBERS**

### **THIRD YEAR**

Abhishek Singh  
Abhishek Yadav  
Ankita Jaiswal  
Antra Saxena  
Deeksha Sharma  
Dhawal N. Asthana  
Lisha  
Perna Arya  
Ravikant  
Ritvik Verma  
Shubham Chand  
Siddharth Sagar  
Srijan  
Vishal Tiwari

# Article 370

It is important to understand what actually constitutes Article 370 and how it affects crucial aspects such as governance in Jammu & Kashmir.

## 1) What is Article 370?

Article 370 of the Indian Constitution is a 'temporary provision' which grants special autonomous status to Jammu & Kashmir. Under Part XXI of the Constitution of India, which deals with "Temporary, Transitional and Special provisions", the state of Jammu & Kashmir has been accorded special status under Article 370. All the provisions of the Constitution which are applicable to other states are not applicable to J&K. For example, till 1965, J&K had a Sadr-e-Riyasat for Governor and Prime Minister in place of Chief Minister.

## 2) History of Article 370.

The provision was drafted in 1947 by Sheikh Abdullah, who had by then been appointed Prime Minister of Jammu & Kashmir by Maharaja Hari Singh and Jawahar Lal Nehru. Sheikh Abdullah had argued that Article 370 should not be placed under temporary provisions of the Constitution. He wanted 'iron clad autonomy' for the state, which centre didn't comply with.

## 3) Provisions of Article 370.

According to this article, except for defence, foreign affairs, finance and communications, Parliament needs the state government's concurrence for applying all other laws. Thus the state's residents live under a separate set of laws, including those related to citizenship, ownership of property, and fundamental rights, as compared to other Indians. As a result of this provision, Indian citizens from other states cannot purchase land or property in Jammu & Kashmir. Under Article 370, the Centre has no power to declare financial emergency under Article 360 in the state. It can declare emergency in the state only in case of war or external aggression.

## STUDENT MEMBERS

### SECOND YEAR

Abhijeet Singh  
Abhilasha Gupta  
Divyany Pandey  
Harsh V. Tripathi  
Hemant Kumar Singh  
Himani Raj  
Ishita Shahi  
Rajan Kumar Soni  
Rajat Srivastava  
Shivangi Srivastava  
Shrishti Verma  
Shwetank Srivastava  
Srijan Singh

The Union government can therefore not declare emergency on grounds of internal disturbance or imminent danger unless it is made at the request or with the concurrence of the state government.