



The Editorial Board

-Beckoning Creati"wit'y



TRESIA

UNIVERSITY'S OWN HARBINGER

"Waste no more time arguing what a good man should be. Be one."
-Marcus Aurelius



Tête-à-tête WITH

Mr. Anil Kumar Srivastava
Madan Mohan Malaviya
University of Technology

Message from The Editorial Board	1
From the Vice Chancellor's desk	2
Tête-à-tête	3
Campus Buzz	5
Tech inSIGHTS	6
Holoportation	8
मानवता मनुष्य का धर्म है	10
Accreditation	11
"How To?"	19



Message from **The Editorial Board**

*“For last year’s words belong to last year’s language
And next year’s words await another voice.
And to make an end is to make a beginning.”*

-T.S. Eliot

It gives us immense pleasure to pen down a few words as a prologue to our monthly newsletter, Tiresia. Year after year, Tiresia has served its primary purpose of inspiring people by emanating knowledge, and at the same time, serving as the best medium for students to showcase their literary skills. As we roll out yet another edition, we hope to achieve these goals and much more.

After Arunoday and Spellczar, Malaviyans are all set to enjoy to their heart’s content in Udgaar’17. With renewed energy, the students are waiting to prove their mettle in Sports and the cultural events of the University.

In the year gone by, seeing the University setting high standards of education and excelling in its various endeavours was heart-warming and we sincerely hope that Malaviyans will march on to etch its name among the top universities in the country.

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FROM THE VICE CHANCELLOR'S DESK

I am pleased to note that the fifth issue of University's monthly newsletter titled Tiresia is being released in February 2017 by the Literary Sub Council of Council of Student Activities of the University. Monthly newsletter acts as a messenger for all the students, teachers and staff members of the University and has the potential to act as a harbinger of changes in the University. Also, it provides an opportunity to students and teachers/staff to exhibit their literary skills for their overall development. Since the beginning of year 2017, the efforts are being made for strengthening the University's infrastructure for meeting the present and future expansion requirements. Foundation laying of a new classroom complex and a girls hostel has already been done for meeting the forthcoming requirements. The ongoing construction of two boys hostels is being expedited for their early completion. On academic front, the University has already recruited 15 faculty members comprising of 01 Professor, 01 Associate Professor and 13 Assistant Professors in different Departments, which will definitely add to the quality of teaching learning processes. It is really a matter of satisfaction to see that the commitment and dedication of all teachers, staff and students is leading to a realization of all the academic and extra-curricular activities in University as per the prescribed academic calendar.

I am confident that the monthly newsletter will act as a reporter for the University activities and achievements on academic fronts and other endeavours in providing quality technical education & enhancing the employability and placement activities of the students, accomplishments of the teachers and staff members on monthly basis. I extend my best wishes to all the members of **The Editorial Board** and believe that this newsletter shall act as potential communication link amongst all stakeholders inside and outside the University for the dissemination of information about good practices and seeking feedback for improving the academic environment of the University for achieving the excellence in technical education.
Jai Hind

-Prof. Onkar Singh

Tête-à-tête

WITH

Mr. Anil Kumar Srivastava



Mr Anil Kumar Srivastava, 1977 batch, was the student of the first batch of Electronics and Communication Engineering of MMMEC. After completing B. E., he joined M. Tech. in BHU. Then after, he joined All India Radio on the basis of Engineering Services Exam 1977 where he worked in the installation team. He also appeared in 1978 exam and joined the Department of Telecom as an ITS officer in 1980. He was posted as Assistant Divisional Engineer and since then he has been working in DOT/BSNL in different capacities like Divisional Engineer, Deputy General Manager, General Manager and Chief General Manager. He was the state head of two states- Chhattisgarh and Gujarat and finally retired as the Chief General Manager of Gujarat Telecom Circle on 31st July 2015. The Editorial Board got an opportunity to interview him.

Q. Sir, please describe your life post Malaviya?

A. My journey post Malaviya turned out to be a really pleasant one. This includes my familial moments and my professional career which was very satisfying. Each day was like a new challenge that life threw at me but this helped me gain a lot of experience and I achieved great success and rose to the highest rank in BSNL.

Q. What was your college life like at that time?

A. As usual, the college life was full of fun. We used to play different games after class hours. My colleagues were sports maniacs and members of at least half of the various college teams. In those days the college was very remotely located because of poor transportation to the main city. Sometimes we used to hire a rickshaw and rode it ourselves for any odd hour requirement.

Since ours was the first batch of Electronics, it was very essential not only for the faculty members but also for the students to take the new department forward. I still remember the tireless efforts of the faculty members headed by Shri H.R.Singh. It will not be fair on my part if I don't recall Shri C.B. Tripathi, Arun Kumar and A.K.Goyal at this point.

Q. What is your success secret?

A. My success secret is none other than working with dedication and putting in concrete efforts for achieving the goal. One should always believe in the motto “Yes, I can do it”. You will seldom fail and even if you fail it will be satisfying that atleast you tried your best.

Q. What are your views on the current state of the Malaviyan Alumni Association?

A. Malaviyan Alumni Association is doing a great job and it is heartening to see Malaviyans on one platform, sharing their views. I feel more such chapters should function at other places where alumni can meet and share their views.

Q. What message would you like to convey to the budding engineers of Malaviya?

A. Always dream beyond your reach and put a focused effort to achieve it. You will definitely achieve the optimum. Never say no to proximating additional responsibilities because this will surely pay you in the future.

Campus Buzz

- Three undergraduate programs viz. **CIVIL ENGINEERING, COMPUTER SCIENCE AND ENGINEERING** and **ELECTRICAL ENGINEERING** were accredited by the **National Board Of Accreditation** as per Washington Accord.
- Good governance day was celebrated with a group discussion on relevant issues on December 22, 2016 followed by a debate competition on December 24, 2016.
- One Week Short Term Course (STC) on “**Modelling and Simulation of Microelectronics Devices and Circuits (MSMDC 2016)**” sponsored by Technical Education Quality Improvement Programme-II (**TEQIP- II**) was organised during December 16-22, 2016 in the Department of Electronics and Communication Engineering.
- SpellCzar’17 was conducted on January 8, 2017 which witnessed immense participation and enthusiasm of the participants. The winners were also rewarded and felicitated suitably.
- **Training And Placement Cell (T&P Cell)** carried out its induction process on January 13, 2017 for the induction of fresh candidates from all disciplines of B.Tech, MCA and MBA.
- **Run for Unity** and felicitation ceremony were organised on **Republic Day, 2017**.
- Online events of **Avalamban** have started from January 16, 2017, organised by **Association of Civil Engineers**.
- Inter-year tournaments of chess, carrom and badminton were organised by the **Council Of Student Activities**.
- **Volleyball tournament 2017** was organised on February 7, 2017.



Tech insights



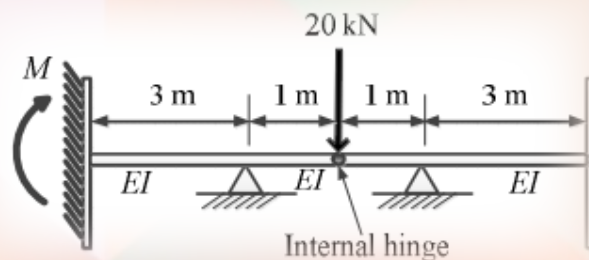
Here are the questions for this month's competition.
Mail your answers to literaryedb@mmmut.ac.in

• CHEMICAL ENGINEERING

The value of 'g' and the number of signals observed for the reference standard, diphenylpicrylhydrazyl (DPPH), in the solid state ESR spectrum are?

• CIVIL ENGINEERING

For the beam shown below, the value of the support moment M is?



• COMPUTER SCIENCE & ENGINEERING

Read the following expression.

```
void (*ptr)(int);
```

- ptr is pointer to int that converts its type to void
- ptr is pointer to function passing int returning void
- ptr is pointer to void that converts its type to int
- ptr is pointer to function passing void returning int

- ELECTRICAL ENGINEERING

A 3-phase, 4-pole, 60 kW, 50 Hz induction motor connected to rated supply voltage and running without load consumes 3 kW. When prevented from rotating it draws rated current at 30% rated supply and takes a power input of 4 kW. Assuming that under rated load conditions, the stator and rotor copper losses are equal and that the mechanical losses are 30% of the no-load losses, determine

- A. Slip at rated load and
- B. Starting torque of the motor with rated applied voltage.

- ELECTRONICS & COMMUNICATION ENGINEERING

The reverse saturation current of the collector base junction (I_{CBO}) of a BJT is found to be 10 nA at low collector voltages. The low current amplification factor (α) is 0.98. Find out the change in collector current with its base open (I_{CEO}) when the collector voltage is increased such that α increases by the 1%.

- MECHANICAL ENGINEERING

The maximum and minimum principal stresses at a point P in a two dimensional loading is such that the Mohr's circle is point located at 175 MPa on the positive normal stress axis. What are the maximum and minimum principal stresses respectively from the Mohr's circle?

Winners of last edition:

No satisfactory answers were recieved.

Virtual Teleportation

Holoportation

The latest technologies have led us down roads that are beginning to look more and more like science fiction stories. In this trail of technological advancement, the most recent addition is Holoportation.

Holoportation is a system that uses a large collection of 3-D and depth cameras. These cameras, placed strategically around a space allow the user to broadcast a fully 3-D version of him or herself. A HoloLens user on the receiving end can put on the device and not only see the user but see the space they are in as well.

The Holoportation process involves stitching the results of the camera feeds together in real time, then sending that information over to the remote user. This process has required some heavy computing power and data bandwidth.

To make this technology mainstream, a reduction has been made in the bandwidth requirements by 97% while still maintaining quality. This new Holoportation system increases the potential applications of real-time 3-D capture and transmission.

For this technology to work, the person has to be surrounded by a massive series of 3-D capture cameras. Those cameras first track every detailed viewpoint of the body and movements in order to let the system stitch them into a 3D model. Then, the data is compressed and transported to HoloLens.

This ultra-realistic figure can interact with as if the person were in the same room. Furthermore, all the holoportation session can be recorded. The recording can be played time and again and can also be minimized or enlarged in size.

The holoportation process is not as simple as it looks like. There is an incredibly huge amount of data that needs to be transferred. And for the most part, the video codecs don't have a good quality for 3D streaming. Compressing the data from gigabytes to megabytes can be quite troublesome without powerful hardware.



If only we could make this process easier, holoportation can really become a part of our daily lives. However, the bandwidth required by Holoportation has been reduced to 30-50 Mbps. This allows us to use Holoportation in a moving vehicle as long as we are within WiFi range.

One approach used to reduce both the processing power and bandwidth needs was by lowering the number of cameras. The new version of the system only uses two cameras instead of eight or more. The more cameras there are, the better the quality of the 3D model being broadcast.

For now, holoportation is still facing some technical setbacks and the availability of internet also poses a challenge but it's hard not to be excited about where holoportation can take us to!



मानवता मनुष्य का धर्म है |

गुणों से मानवता की पहचान होती है!
ऊँचे सहिसन पर बैठने से नहीं...
महल के उच्च शखिर पर बैठने के
बावजूद कवा का गरुड़ होना असंभव है!



आज के इस भौतिक युग में यदि मनुष्य, मनुष्य के साथ सद्व्यवहार करना नहीं सीखेगा, तो भविष्य में वह एक-दूसरे का घोर विरोधी ही होगा। यही कारण है कि वर्तमान में धार्मिकता से रहित आज की यह शिक्षा मनुष्य को मानवता की ओर न ले जाकर दानवता की ओर लिए जा रही है। जहां एक ओर मनुष्य आणविक शस्त्रों का निर्माण कर मानव धर्म को समाप्त करने के लिए कटिबद्ध है, वहीं दूसरी ओर अन्य घातक बमों का निर्माण कर अपने दानव धर्म का प्रदर्शन करने पर आतुर है।

ऐसी स्थिति में विचार कीजिए कि 'वसुधैव कुटुम्बकम्' वाला हमारा स्नेहमय मूलमंत्र कहां गया? विश्व के सभी मनुष्य जब एक ही विधाता के पुत्र हैं और इसी कारण यह संपूर्ण विशाल विश्व एक विशाल परिवार के समान है, तो पुनः परस्पर संघर्ष क्यों? यह विचार केवल आज का नहीं है। समय-समय पर संसार में प्रवर्तित अनेक प्रमुख धर्मों में इस व्यापक और परम उदार विचारकण का सामंजस्य मिश्रित है। मानवता मनुष्य का धर्म है। सभी मनुष्यों में स्नेह करने का मूल पाठ मानव धर्म सिखाता है। जाति, संप्रदाय, वर्ण, धर्म, देश आदि के विभिन्न भेदभाव के लिए यहां कोई स्थान नहीं है। मानव धर्म का आदर्श और इसकी मनोभूमि अत्यंत ऊंची है और इसके पालन में मानव जीवन की वास्तविकता निहित है।

मानव धर्म सभ्यता और संस्कृति की एक प्रकार की रीढ़ की हड्डी है। इसके बिना सभ्यता व संस्कृति का विकास कल्पना मात्र ही है। मानव धर्म की वास्तविकता और उपादेयता इसी में है कि मनुष्यत्व के विकास के साथ ही साथ विश्व भर के लोग सुख, शांति और प्रेम के साथ रहें। प्राणिमात्र में रहने वाली आत्मा उसी परमपिता परमेश्वर का अंश है। प्रत्येक में एक ही जगतनियंता प्रभु का प्रतिबिंब दिखलाई देता है, यह समझकर मनुष्य की ओर आदर भावना बनाए रखें, तब ही अंतरराष्ट्रीय भावनाओं का, चाहे वे राजनीतिक, आर्थिक, सामाजिक और सांस्कृतिक हों, सर्वांगीण विकास संभव है। मानव धर्म का आध्यात्मिकता और नैतिकता से महत्वपूर्ण संबंध है। यदि कोई मानव चारित्रिक या नैतिक आदर्शों में उसकी श्रद्धा नहीं है, ईश्वरीय सत्ता में यदि उसका विश्वास नहीं है, इसके अतिरिक्त सहृदयता, सात्विकता, सरलता आदि सद्गुण उसमें नहीं हैं, तो इस स्थिति में यह स्वीकार करना होगा कि अभी उसने मानव धर्म का स्वर-व्यंजन भी नहीं सीखा है।

Accreditation:

Quality assurance for education and training.

At the time of counseling session of the year in the academic calendar, parents and students scrutinise hundreds of institutions to make the right choice. After that comes the importance of accreditation of certain courses from national bodies which makes colleges and universities attractive. An NBA or AICTE accreditation has several benefits for institutions as well as students. AICTE was established in 1945 to plan and control technical education in India. The recommendations of the Raman Committee on fee structure for engineering courses ought to have served as a stimulus for engineering colleges to seek NBA accreditation. As per the recommendations, the fee for non-accredited course is Rs. 32,000 and for accredited course Rs. 40,000. But there are some major factors that determine the much greater aspects of accreditation.

Colleges from which at least two batches of students have graduated in AICTE-approved programmes are eligible to apply for NBA accreditation, where AICTE stands for All India Council for Technical Education and NBA stands for National Board of Accreditation. But still most of the colleges do not seem to be serious about subjecting themselves to the accreditation accorded at the programme level based on indices of academic ambience, infrastructure, financial, physical and human resource, supporting systems like library, computational resource, and avenues to mould the students' personality.

NBA was initially established by AICTE for periodic evaluation of technical institutions & programmes basis according to specified norms and standards as recommended by AICTE council.

FINAL YEAR MEMBERS

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

The general understanding is that the syllabus for technology programmes becomes outdated within three and a half years. If it is in computer science and engineering, the syllabus becomes outdated in one and a half years. Under such circumstances, the accreditation is less relevant, because the teachers' knowledge becomes obsolete and the syllabus becomes outdated. The aim of accreditation is to assure that the institutions that offer education and training undergo a process of accreditation and ensure their quality at all times. The three components of quality assurance in education and training are:

1. Quality of every component needs attention with regard to the up-keep of quality standards.
2. Expiry of quality standards of these components with respect to the period of validity of accrediting grades.
3. Accreditation grades are valid for three to five years. This leads to outdated syllabi and obsolete infrastructure and equipment. It should be dynamic and have the flexibility of upgrading or downgrading the status dynamically based on the factors concerned.

Accreditation is market-driven and has an international focus. It assesses the characteristics of an Institution and its programmes against a set of criteria established by National Board of Accreditation.

NBA's key objective is to contribute to the significant improvement of the Institutions involved in the accreditation process. Accreditation process quantifies the strengths, weaknesses in the processes adopted by the Institution and provides directions and opportunities for future growth.

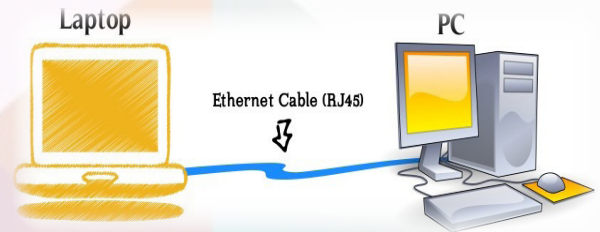
NBA accredited Institutions may be preferred by funding agencies for releasing grants for research as well as expansion etc.

NBA provides a quality seal or label that differentiates the Institutions from its peers at the national level. This leads to a widespread recognition and greater appreciation of the brand name of Institutions and motivates the Institutions to strive for more.

THIRD YEAR MEMBERS

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

‘How To?’



How to Connect Two Computers Together with an Ethernet Cable:

If you lack access to a network, and need to transfer files or establish a connection between two computers, you can connect the computers to one another using a crossover Ethernet cable. After connecting your computers together with an Ethernet cable, you will be required to modify the network settings on one of the computers to establish the cable connection. You will then have the ability to transfer or share files, and play network games between both computers.

1. Verify that you have a crossover Ethernet cable. A crossover Ethernet cable is required to connect computers with Windows OS; whereas a standard Ethernet cable will only establish a connection between a computer and router. Examine the wire color patterns at each end of the Ethernet cable to determine whether or not the colors match up. A crossover Ethernet cable will have colour patterns that do not match up; whereas on standard cables, the color patterns will match up to one another identically on each end.
2. Plug each end of the Ethernet cable into an Ethernet network port on each computer to connect the computers together with the cable.
3. Go to any one of your computers, and click on the “Start” menu. The “Start” menu often resembles the Microsoft Windows logo on computers running Windows 7.
4. Select “Control Panel”, then type “network” into the search box provided to you within Control Panel.
5. Select “Network and Sharing Center” from the options displayed in the window. Select and open the icon labeled “Unidentified network” from the network map at the top of the Network and Sharing Center window. This icon may display as “Multiple networks” if you have more than one network. In Windows 8, click change advanced sharing settings (on the left list).
6. Click on the message that prompts you to change the network discovery and file sharing settings, then click on the option that reads, “Turn on network discovery and file sharing.”
7. Type the administrator password for the computer if prompted to do so, then press “Enter” on your keyboard. Both of your computers will now be visible in the Network and Sharing Center window, and you will have the ability to share files and other resources.

SECOND YEAR MEMBERS

Aaruni Khare
 Abhishek Verma
 Anurag Dhar Dubey
 Archish Jaiswal
 Arushi
 Krati Tiwari
 Manisha Mishra
 Narendra Mishra
 Pragya Pandey
 Shreya Mishra
 Shreyansh Srivastava
 Shubham Pathak
 Somiya Bhandari
 Tanmay Kumar