Understanding not only Numbers, Equations & Algorithms; But Life itself-

# **Department of Mathematics**

## and Statistics

### "Good teachers know how to bring out the best in students"-

Charles Kuralt-American Journalist

28+2C=-10,3

The department constantly makes efforts to help students academically. The department faces the challenge at both FYBCOM and TYBCOM levels in subjects of Mathematics and Computer Systems & Applications respectively with regards to imbalance of subject knowledge of students. But the members of the department strive to make the subject achievable for students by revision lectures and hands on practical sessions for FYBCOM and TYBCOM students respectively.

The young members of the department gave their best to the departmental activities and fully cooperated with the work assigned to them. I take this opportunity to thank my members for their contribution to smooth functioning of the department.

#### **Academic Activities:**

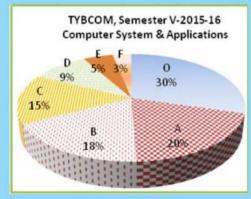
- As our practice, the department conducted Preliminary examination of 75 marks for TYBCOM students to
  provide them with practice for Semester V and Semester VI University examinations. Semester V and VI mock
  preliminary examinations were conducted for TYBCOM students for practice purpose.
- 2) Revision lectures and extra lectures: Principal Dr. N. N. Pandey took remedial lectures for the students of FYBCOM and inspired department members to carry on with remedial lectures for the students' benefit. Revision lectures for Semester V and VI were held for TYBCOM students in subject of Computer Systems and Applications. The students were posted with notes and other instructions on Yahoo group. Ms. S. A. Mandavawalla (HOD) was invited on 29th Feb 2016 to deliver special lecture to TYBCOM students in the subject of Computer Systems and Applications.

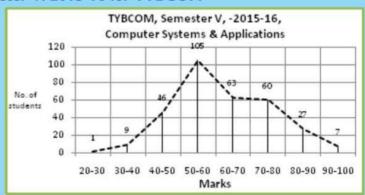
#### Research:

#### Principal Dr. N. N. Pandey

 Was appointed as a member of the Expert Committee to visit and scrutinize the proposal of opening of new college at Sonopant DandekarShikshanMandali's Commerce Women's College, Palghar on 3rd March.

#### Result of Semester V: 2015-16 for TYBCOM





O: >=70%, A: >=60% &<70%, B: >=55% &<60%C:>=50% &<55%, D: >=45% &<50% E:

>=40% &< 45%F: <40%

 Was appointed as the Vice-Chancellor's nominee by the University of Mumbai on the Selection Committee to scrutinize the applications received and conduct the interview for the post of Principal at Sanskar Sarjan Education Society's Dhirajlal Sankalchand Shah College of Commerce, Malad on 11th March.



- Was nominated as an external examiner byHon'ble Vice Chancellor of V.B.S. Purvanchal University, Jaunpur (U.P) to evaluate the thesis entitled 'A Study of Basic Hyper Geometric Functions, Continued Fractions and Certain q-Identities' in the Subject of Mathematics on 16th September.
- The essence of Math is not to make simple things complicated, but to make complicated things simple

  S. Gudder
- Was appointed as Vice-Chancellor's nominee at the Selection Committee for the selection of Assistant Professor in subject Business Communication at Smt. Kamladevi Gauridutt Mittal College of Arts and Commerce on 21st September.
- Was invited as the Chief Guest at the B.K. Gadiyaa Memorial Trophy Elocution Competition organized by B.K. Gadiya College on 10th October.
- Evaluated a thesis titled: 'A Study of Basic Hypergeometric Functions, Continued Fractions and certain q-identities', by a Research scholar from V. B. S. Purvanchal University on 30th January.

#### Prof. Swati Mandavawalla

- Was invited for lecture as Subject expert in BSc(IT) at KES College on 23rd June.
- Was invited for guest lecture for TYBCom students in the subject of Computer System and Applications at J. M. Patel College 29th December.



Prin. Dr. N. N. Pandey with TYBCOM students wishing the best for Computer System and Application paper for Sem VI University exam

 Attended a workshop on 'Qualitative Research Methodology in Social Sciences' organized by SVT College of Home Science, SNDT University from 5th to 10th October.

#### Dr. Swati Desai

MAY NOT TEACH US HOW TO ADD LOVE OR MINUS HATE, BUT

IT GIVES US EVERY REASON TO

HOPE THAT EVERY PROBLEM

HAS A SOLUTION.

- Invited- for revaluation of Answer papers in Maths & Stats at K G Mittal College on 24th June; as Chief Guest to inaugurate the NSS Cell at St. Francis Engineering College, Borivli on 22nd July; as a judge at the intercollegiate Presentation competition Dataspeak at J. M. Patel College on 30th January; as the member of the organizing committee at JJTU, Jhunjhunu Rajasthan, for its Convocation Ceremony 2015-16 on 5th February; for the seminar 'Jal-Thal-Mal PrabhandhanVyakhyanmala' at Marathi BhashaBhavan, Kalina campus on 17th February; as a member of Advisory Committee of National Conference on 'Demographic Shift- Road to sustainable Development' at J.M. Patel College on 23rd February.
- Conducted Tree plantation program at University Campus, Kalina on 5th June; a District level award function
   and presented the plan for the academic year 2015-16 in the capacity of

District Coordinator at V. V. Bhavan, Churchgate on 27th July.

- Was appointed as Camp Coordinator for National Integration Camp of 18 States organized by NSS University The theme being 'women and environment' at University of Mumbai, Kalina from 28thJune to 4th July.
- Organized- a National Integration Camp as NSS District Coordinator and Camp Coordinator on the topic: 'Women and Environment' at Kalina campus, Mumbai University on 1st to 4th July; a half day seminar for NSS volunteers on World Population Day at L.S. Raheja College, Santacruz on 11th July.

- Participated in the celebration of 153rd birth anniversary of Swami Vivekananda on the occasion of the International Youth Day at Marathi Bhasha Bhavan, Kalina campus on 12th January.
- Was the Camp coordinator of the State Republic Day (SRD) Camp and at the Pre-SRD Camp. She organised and coordinated guest lectures for volunteers at the Shankarrao Chavan Training Academy, Kalina campus from 17th-26th January.

#### Dr. Jayprakash Yadav

 Attended - one day National Conference on 'Contemporary strategies in Higher Education' organised by SPDT College on 13th Feb; a one week short term course in Mathematics organized by the department of Mathematics at SVNT, Surat, Gujarat.



Dr. N. N. Pandey welcoming Adv. Pankaj Bafna Investigator in Cyber Crime

Also presented a research Paper titled 'On certain transformations of Basic Hypergeometric functions' from 30th Sep to 4th October.

 Presented a research Paper entitled 'On Transformations of Basic Hypergeometric functions using q-fractional Operators' organized by the Department of Mathematics in Collaboration with Ramanujan's Society for Mathematics and Mathematical Sciences at TDPG College, Jaunpur from 4th to 6th October.

Appointed as a subject expert for the viva of Ph.D. student at Purvanchal University, Jaunpur.

#### **Prof. Sandeep Gupta**

- Completed Ph.D. Course work at JJTU, Rajasthan from 24thMay to 14th June.
- Presented a paper on 'Learning Advanced Classroom 'Using Google Hangout' at the 2nd Multidisciplinary National Conference on Economic Realities Impacting Higher Education in India at JJTU, Rajasthan on 1st June.

#### **Guest lecture:**

We all know that there is huge influence of internet on our daily life. It has brought the world closer and at the same time made it a smaller place to live in for all internet users. Undoubtedly it has changed our lives enormously so much so that it is "THE" medium of the future. However the internet users who spend long hours on cyber space face another problem called cybercrime.

Cybercrime commonly includes Hacking, Theft, Cyber Stalking, Identity Theft, Malicious Software and many more.

While law enforcement agencies are trying to tackle this problem, it is growing steadily and many people have become victims of these cybercrimes and cyber-attacks. One of the best ways to avoid being a victim of cybercrimes and protecting our sensitive information is by making use of impenetrable security that uses a unified system of software and hardware to authenticate any information that is sent or accessed over the Internet. Therefore we thought that it would be necessary to be aware about some good and bad aspects of this medium, how to safeguard ourselves in cyber space and how to minimize cyber vulnerability. To enlighten all of us on these issues and many others, we had invited an eminent lawyer, specialist in dealing with cybercrimes and cyber laws Adv. Pankaj Bafna elaborated on the following points in the seminar:



Holding the dignitaries' in rapt attention

- Keeping a password lock in mobile phone doesn't protect it from hackers
- Downloading free apps in mobile may lead to criminals viewing our personal database
- · Criminals may find our IMEI code using our mobile numbers and use that code for criminal activities
- Explained about cyberstalking with an example of 2013 case of famous actor Shruti Hasan



- Explained that if our mobile is lost and found easily then first thing we must do is to lodge a complaint with SISKA
- Forming a WhatsApp group and adding people in the group without their prior permission is an offence.
- Legal notice in the form of a message or email is also valid
- Viewing or sending pornography is a criminal act
- Never respond to messages offering rewards of money
- Music directors copyright their songs. So downloading free songs from unauthorized sites is also an offence. Eg: www.songs.pk.com
- Mentioned about killing a person using a song sent through WhatsApp.
- Songs should never be downloaded for free
- Criminals involved in Cybercrime are mostly aged between 12 to 16 years, as they have a creative mind
- Children aged below 16 yrs cannot have an account on social networking websites.
- Shopping websites such as amazon.com, eBay.com do not have any security system for our personal data
- Never allow anyone to scan credit cards especially, backside (in malls). This may be used by criminals to duplicate the card
- Keep a watch on our mobiles whether it is cloned or not. Criminals clone our mobiles using data obtained from service centers.
- Never use free sim cards.

#### Innovation

The department also began with an innovative practice under the theme 'Uniformity'. This practice was adopted to track the teaching plan prepared at the start of the academic year. With the semester system in place, the teaching days are not enough to include revision and paper solution. Hence to ensure the syllabus is complete in time with the provision for revision this practice was planned and executed throughout the academic year. The purpose of this following this practice was also to ensure that all members in the department follow a uniform pattern of solving examples of various difficulty levels. The process of uniformity is yet to evolve to conclusive outcome, yet this exercise helped in tracking the teaching plan. Contribution to eco-friendly theme less paper use.



Solving students'

**Queries on Cybercrime** 

Adv. Pankaj Bafna addressing an enthusiastic audience

The department also took measures to cut on paper use by displaying the tutorial sheets on notice board as well as solving them on board in tutorial lectures.

With a committed teaching staff that is both research oriented and student centric, our department yearns to do its best at every activity that it undertakes.

**Prof. Swati Mandavawalla** Head of the department