ADVISORY COMMITTEE

Prof. Aditya Shastri
Vice Chancellor, Banasthali University

Prof. B. K. Dass
Delhi University, New Delhi

CONVENOR
Prof. G. N. Purohit

COORDINATORS
Prof. Sarala Pareek
Dr. Deepa Sinha

ORGANIZING SECRETARIES
Mr. Prashant Kushwah
Mr. Pravin Garg

ORGANIZING COMMITTEE

Mrs. Amla Olkha
Mr. Piyush Kant Rai
Dr. Gauree Shanker
Dr. Praveen Kumar Gupta

PROGRAM COMMITTEE

Dr. Narendra Thakur, Ms. Nidhi Khandelwal, Mrs. Swati Raj, Ms. Jyoti Sharma, Dr. Madhulika Kedawat, Ms. Kalpna, Ms. Geetanjali Sharma, Ms. Usha Sharma, Ms. Mansi khurana, Ms. Preeti Jain, Ms. Isha Sangal, Ms. Shinu, Ms. Sujata Rani, Ms. Ritu

IMPORTANT DATES

Workshop: May 3-6, 2012

Registration Deadline: April 20, 2012

Announcement of final list of participants: April 23, 2012

There is no registration fee. The selected participants will be informed by mail/phone/fax. They will be reimbursed (AC-3 Tier) (train/bus fare to and fro and will be provided free lodging and boarding at Banasthali university.

The completed registration form should be posted to

The Coordinator
Workshop on Cryptography and Number Theory
Centre for Mathematical Sciences (CMS)
Apaji Institute of Mathematics and Applied Computer Technology
Banasthali University-304022
Rajasthan
Phone: (01438) 228647/48 Fax: (01438) 228649
Or
It can be mailed at nwcnt2012@gmail.com

(Registration form can be downloaded from the university website www.banasthali.org**)**

Contact:
AIM & ACT
Banasthali University
Banasthali (Rajasthan) 304022
Phone: (01438) 228647/48 Fax: (01438) 228649
Email: nwcnt2012@gmail.com

How to reach Banasthali University:
Banasthali is located 72 km from Jaipur, 8 km off on Jaipur Kota road. Frequent bus service is available for Banasthali University campus/Newai from main Bus Stand (Sindhi Camp) Jaipur. Newai is 10 km from Banasthali. Conveyance is available at Banasthali Newai (WR, Jaipur Kota Broad-guage Line) Railway Station. Jaipur (Sanganer) Airport is 59 kms from Banasthali.

URL-http://www.banasthali.org

National Workshop on CRYPTOGRAPHY and NUMBER THEORY

May 3-6, 2012

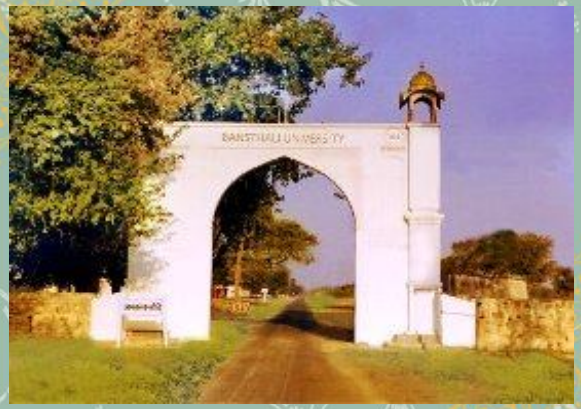
Sponsored by

Department of Science & Technology
Government of India, New Delhi

Organized by
Centre for Mathematical sciences (CMS)
AIM & ACT

Banasthali University
Banasthali 304022 (Rajasthan)

University for women: University with a difference



Banasthali University

University for women: University with a difference

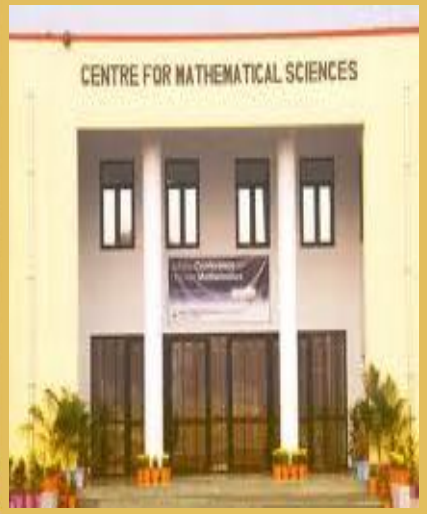
Banasthali University, for women education is a unique university, which offers an integrated system extending from the primary to the Ph.D. level. It was founded on October 6, 1935 and attained deemed to be University status on October 25, 1983.

The University aims at the synthesis of spiritual values of the east and scientific achievements of the west. It strives for development of all round personality of its students through its five-fold education programme. At present, it has around 25 teaching departments offering 120 courses, having over 370 teachers and educating nearly 9000 students. The institution offers several programmes in the emerging areas, such as Management, Biotechnology, Computer Science, Information Technology, Mathematical Sciences, and Electronics, besides the traditional courses in Humanities, Social Sciences, Home Science, Education and Fine Arts.

Apaji Institute of Mathematics and Applied Computer Technology (AIM & ACT) was founded in 1999 with the objective of achieving synergy between teaching and research in Computer Science, Electronics, Mathematics, and Statistics, Physics, Bio-informatics and Information Technology have been also added to this list later. In this short span of about eleven years, Apaji Institute with its world-class infrastructure and education programmes has earned the reputation of one of the best centre of teaching and research not only in the state but also in India. The students get placement in all leading companies and organizations. Many of them have gone abroad for higher education and research.

One of the strong points of Apaji Institute is to infuse logical abilities and abstract thinking in its students by integrating learning of Mathematics in all its programmes. The ambitious programme of M.Sc. (Mathematical Science) was designed with inputs from leading experts from IIT's, IISc and TIFR and offers several specializations such as Theoretical Computer Science, Statistics and Operation Research in addition to Pure and Applied Mathematics in the institute. Now M. Phil. programme in Mathematical Science has also been started to provide the required research orientation to the desirous students. Institute has conducted three major events for enhancements of R&D and making a recurrent research environment.

To motivate research, Department of Science and Technology Govt. of India has declared Banasthali University as the Centre for Mathematical Sciences (CMS) in November 2007. The first year of the establishment of the centre witnessed significant increase in the academic activities of the CMS. In addition to the usual seminar and in-house research it has organized 17 seminars/workshops on various topics in the last two years. Besides this it also organized "Mini MTTS Programme for Graduate Students (December 18-24, 2010)".



Cryptography & Number Theory

In present times, there is strong pressure to make academic studies more relevant. Number Theory provides numerous evidences that the topics pursued for their own intrinsic interest find significant applications later on. Application of Number Theory to Cryptography is such an example. As the field of cryptography expands to include new concepts and techniques, these applications have also broadened. In addition to elementary and analytic number theory, increasing use has been made of algebraic number theory (primality testing with Gauss and Jacobi sums, cryptosystems based on quadratic fields, the number field sieve) and arithmetic algebraic geometry (elliptic curve cryptosystems based on elliptic and hyperelliptic curves). Nowadays, Cryptography sole become a broad area of research. A wide variety of applications of cryptography exist such as secure email, e-commerce and smart cards. The Workshop is intended for young faculty and researchers from Mathematical Sciences and Computer Science who are interested in the field from in and out Banasthali. The participants are required to be familiar with basic concepts of number theory and cryptography, for this they have to provide evidence along with the registration form.

Eminent speakers in the field, who have consented (tentatively) to address the participants, are:

1. Prof. R. K. Shyamasundar, TIFR, Mumbai
2. Prof. R. Tandon, University of Hyderabad
3. Prof. S. Lal, Purvnchal University, Jaunpur
4. Prof. S. A. Katre, University of Pune
5. Prof. R. K. Sharma, IIT Delhi
6. Prof. V. M. Patankar, ISI Chennai
7. Prof. G. N. Purohit, Banasthali University