**National Workshop** 

on

**Inventory Modeling** 

March 04-07, 2011

Sponsored by

# Department of Science & Technology Government of India, New Delhi



Organized by Centre for Mathematical Sciences (CMS) Apaji Institute of Mathematics & Applied Computer Technology Banasthali University Banasthali - 304022 (Rajasthan)

University for women, University with a difference

**B**anasthali 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 develops all round personality of its students through its five fold education programme. Considering its relatively short existence as a University, the institution has made phenomenal progress. At present, it has around 20 teaching departments offering 100 courses, over 550 teachers and nearly 8000 students. The institution offers several programmes in the emerging areas, which include advanced courses at undergraduate and postgraduate levels in 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 twelve 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 the three major events for enhancements of R& D and making a recurrent research environment.

- i. National Seminar on Recent Trends in Combinatorics and its Applications (March 2006).
- ii. Training programme on 'Stochastic Process Modeling' (Dec 2-15, 2006).
- iii. National Workshop on 'Models of Embedded Computation' (March 2007).

To motivate research, Department of Science and Technology Govt. of India have declared Banasthali University as the **Centre for Mathematical Sciences (CMS)** in November 2007. The three years 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 the following conferences, workshops and training programmes were held:

- i. National Workshop on Bayesian Techniques and its Applications (October 1-7, 2008)
- ii. Training Programme on Optimization Techniques (December 24-29, 2008)
- iii. Pre Conference workshop on Discrete Mathematics (January 6-10, 2009)
- iv. Jubilee Conference on Discrete Mathematics (January 11-13, 2009)
- v. Seminar on Time Series Modeling (Oct 3-6, 2009)
- vi. Workshop on Mathematical Modeling (December 15-19, 2009)
- vii. Workshop on Discrete Mathematics (May 1-5, 2010)

The events had very distinguished experts in the respective fields from IISc Bangalore, ISI Kolkata, ISI Delhi, IIT Mumbai, TIFR Mumbai, B.H.U. Varanasi, ISI Hyderabad, ISI Coimbatore etc.

Workshops on core areas of **Centre for Mathematical Sciences** have been also planned. Workshop on Inventory Models, one of the activities to be held to promote research in Inventory Theory, is one of these events.

# National Workshop on Inventory Modeling

Inventory control is one of the most developed fields of operations management and much space has been devoted to this topic in the management science. For most organizations inventory is one of the more visible and tangible aspects of business and trading. Inventory helps the management to make an effective use of its capital and to minimize the possible risk of loss. Inventories provide a basic description of the functions of the inventory management and discuss real world applications of inventory management. Nowadays inventory control plays a significant role in supply chain management, production planning, vendor-buyer problem, warehouse problem etc. to enhance the business and market value. The workshop aims to provide a broad overview of basic concepts and good inventory management strategies.

The workshop will be conducted with an objective to promote awareness in the topic among research scholars and teachers from Universities and Colleges in the country.

The workshop is intended for young faculty and researchers in Mathematical Sciences and Computer Science. Tentatively following topics will be covered in the workshop:

- 1. Basics of Inventory Modeling
- 2. Warehouse Problems and Modeling under Inflation, Permissible delay in Payments etc.
- 3. Inventory Models under Fuzzy Environment
- 4. Stochastic Inventory Models
- 5. Buyer-Vendor Co-ordination in Supply Chain Management
- 6. Inventory Modeling through Genetic Algorithm
- 7. Robust Optimization Techniques in Inventory Control

The eminent speakers are invited and have agreed to deliver lectures.

- 1. Prof. Adrijit Goswami (IIT, Kharagpur)
- 2. Dr. C. K. Jaggi (Delhi University)
- 3. Dr. S.P. Sarmah (IIT, kharagpur)
- 4. Prof. C.B. Gupta (BITS, Pilani)
- 5. Dr. Nita H. Shah (Gujarat University, Ahmedabad)
- 6. Dr. S.R. Singh (CCS University, Meerut)

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# **IMPORTANT DATES**

### Registration Deadline: Feb. 12, 2011

#### Announcement of final list of participants: Feb. 15, 2011

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

The completed registration form should be posted to :

The Coordinator National Workshop on Inventory Modeling Centre for Mathematical Sciences (CMS) Apaji Institute of Mathematics and Applied Computer Technology Banasthali University-304022 Rajasthan Phone: +91-9352141484/85, +91-9983071813 Or

It can be mailed at <u>nwim.cms@gmail.com</u> (Be careful about the dot in e-mail address for correspondence)

(Registration form can be downloaded from the university website <u>www.banasthali.org</u>)

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

How to reach Banasthali University:

Banasthali is located 72 km from Jaipur, 8 km off on Jaipur Kota Highway NH-12. 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.