

National Workshop
on
Inventory and Transportation
March 15-18, 2012

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

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 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.

To develop mathematical studies and motivate research in this area of India, Department of Science and Technology Govt. of India assisted in establishing the **Centre for Mathematical Sciences (CMS)** in Banasthali University in November 2007. Since the establishment of the centre (CMS) has witnessed significant increase in the academic activities. In addition to the usual seminar and in-house research it has organized 16 seminars/workshops on various topics in the last two years. Besides this it also organized "Mini MTTTS Programme" for Graduate Students during December 18-24, 2010.

This year, workshops on core areas of **Centre for Mathematical Sciences** have been also planned. Present workshop on Inventory and Transportation is planned to introduce the basics and promote research in Inventory Theory, Transportation and Assignment Problems.

**National Workshop
on
Inventory and Transportation**

Inventory control is one of the most important and applications oriented topic in operations research which finds applications in production management. For many organizations inventory is one of the most visible and tangible aspects of business and trading and helps the management to make an effective use of its capital and minimizes the possible risk of loss. 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. Another aspect in these areas is Transportation problem. A sister stream related to inventory is transportation.

A typical transportation problem deals with sources where a supply of some commodity is available and destinations where the commodity is demanded. The basic purpose is to minimize the cost of transportation, meeting all the constraints of warehouse capacities, production outputs and transportation charges. Assignment problem is to assign a job to proper client for efficient implementation of the project. The workshop is intended for young faculty and researchers in Mathematical Sciences and Computer Science.

The workshop aims to provide a broad overview of basic concepts, operational algorithms and recent theories related to these topics. The ultimate objective is to promote awareness about recent trends in these areas among researchers and teachers from Universities and Colleges in the country.

Tentatively following topics will be covered in the workshop:

1. Basics of Inventory, Warehouse Problems, Modeling under Inflation, Permissible delay in Payments etc.
2. Fuzzy Environment and Stochastic Inventory Models

3. Buyer-Vendor Co-ordination in Supply Chain Management
4. Inventory Modeling through Genetic Algorithm
5. Optimization in Transportation and Assignment Problem
6. Some alternative methods of Transportation Problem

Eminent resource persons who have consented (tentatively) for the workshop:

1. Prof. Adrijit Goswami (IIT, Kharagpur)
2. Prof. R.C. Srivastav (DDU, Gorakhpur University)
3. Prof. M.K. Tiwari (IIT, Kharagpur)
4. Prof. Nita H. Shah (Gujarat University)
5. Prof. D.K. Ghosh (Sourashtra University, Rajkot)
6. Dr. C. K. Jaggi (Delhi University)
7. Dr. S.P. Sarmah (IIT, Kharagpur)

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Vice Chancellor, Banasthali University

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Sangal, Ms. Shinu, Ms. Sujata Rani, Ms. Ritu

IMPORTANT DATES

Registration Deadline: March 5, 2012

Announcement of final list of participants: March. 10, 2012

There is no registration fee. The selected participants will be informed by mail/phone/fax. They will be reimbursed third AC train/ deluxe bus fare to and from Banasthali and will be provided free lodging and boarding at Banasthali university. Participants are required to present their research/work related to the theme of the workshop during the interaction session. You have to bring the necessary article/paper in hard copy as well as soft copy.

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 **nwit.cms@gmail.com** (Be careful about the dot in e-mail address for correspondence)

(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: **nwit.cms@gmail.com**

How to reach Banasthali University:

Banasthali is located 72 km from Jaipur, 8 km off on Jaipur Kota Highway NH-11. 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.