

Report of Live Telecast of Workshop on Ancient Indian Mathematics

1st -14th August, 2018

A workshop on Ancient Indian Mathematics was organized at Savitribai Phule Pune University under the auspices of Lokmanya Tilak Chair from 1st Aug to 14th Aug, 2018. The workshop was interdisciplinary and was organized with the cooperation of Mathematics and Sanskrit Department of S.P. Pune University and Bhaskaracharya Pratishthana, Pune. We have shown the live telecast of the workshop at MIT Arts, Commerce and Science College, Alandi (D), Pune for our students and faculties.

Organizing Committee For Live Telecast of Workshop at MIT ACSC:

Coordinator: Mr. Pradip D. Pansare

Committee Members: Mrs. Vijayalaxmi M.K., Mrs. Sushma Chalke, Mrs. Manjula Choudhary, Mr. Sanjay B. Gunjal, Mr. Sarpharaj Tamboli, Mr. Vasant Karmad, Mrs. Vasudha Shindhe.

The workshop was inaugurated by Prof. Nitin Karmalkar, Vice Chancellor, S. P. Pune University at 3.30 pm on 1st August 2018.

The lectures was beneficial to Mathematics and Sanskrit teachers and students and others too who was interested in Ancient Sanskrit Scientific literature. The speakers were quote and explain the verses from the original Sanskrit texts of Aryabhata (476–550 CE), Sridharacharya (c. 750 CE – c. 930 CE), Mahaveeracharya (9th Century) and Bhaskaracharya (1114–1185). There was lectures on Bodhayana Shulbasutras (c. 800- c.600 BC) which have the statement of Pythagoras Theorem. Also another highlight of the Workshop was to bring forward two less known and important parts of Siddhanta Shiromani of Bhaskaracharya viz. Grahadyaya and Goladhyaya.

The Workshop was funded under the joint programmes of The National Academy of Sciences, India, and The Mathematics Consortium.

- Prof. S. A. Katre, Chair Professor, Lokmanya Tilak Chair, SPPU (Coordinator)
- Dr. Mugdha Gadgil, Dept. of Sanskrit & Prakrit Languages, SPPU (Co-Coordinator)
- Dr. Ganesh Kadu, Dept. of Mathematics, SPPU (Co-Coordinator)

Details of Sessions:

1st August

Inauguration: 3.30 pm

Lecture 1: Prof. Saroja Bhate, Topic: Gaṇitapāda of Aryabhata, Time: 4.15 to 5.15

Lecture 2: Dr. Mugdha Gadgil, Topic: Līlāvātī of Bhaskaracharya, Time: 5.15 to 6.15

2nd August

Lecture 1: Dr. Mugdha Gadgil, Topic: Līlāvātī, Time: 3.30 -4.30

Lecture 2: Prof. G. U. Thite, Topic: Introduction to Śulbasūtras, Time: 4.40-5.00

Lecture 3: Prof. S. G. Dani, Topic: Mathematics in Śulbasūtras, Time: 5.15-6.15

3rd August

Lecture 1: Dr. Mugdha Gadgil, Topic: Līlāvātī, Time: 4.00 -5.00

Lecture 2: Prof. S. G. Dani, Topic: Mathematics in Śulbasūtras, Time: 5.15-6.15

4th August

Lecture 1: Dr. Mugdha Gadgil, Topic: Līlāvātī, Time: 4.00 -5.00

Lecture 2: Prof. S. G. Dani,

Topic: Pāṭīgaṇita of Sridharacharya & Gaṇitasārasaṅgraha of Mahaveeracharya Time: 5.15-6.15

6th August

Lecture 1: Dr. Mugdha Gadgil, Topic: Līlāvātī, Time: 4.00 -5.00

Lecture 2: Prof. S. A. Katre, Topic: Bījagaṇita of Bhaskaracharya, Time: 5.15 to 6.15

7th, 8th, 9th, 10th August

Lecture 1: Dr. Mugdha Gadgil, Topic: Līlāvātī, Time: 4.00 -5.00

Lecture 2: Dr. Venketeswara Pai, Topic: Grahādhyāya of Bhaskaracharya, Time: 5.15 to 6.15

11th August

Lectures 1,2: Prof. S.A. Katre, Topic: Bījagaṇita of Bhaskaracharya, Time: 4.00-5.00 & 5.15-6.15

13th August

Lectures 1, 2: Prof. M. S. Sriram, Topic: Grahādhyāya of Bhaskaracharya,

Time: 4.00 -5.00 & 5.15-6.15

14th August

Lectures 1, 2: Prof. M. S. Sriram, Topic: Golādhyāya of Bhaskaracharya,

Time: 4.00 -5.00 and 5.15-6.15

Speakers:

Prof. Saroja Bhate: Retd. Professor, Department of Sanskrit & Prakrit Languages, SPPU

Dr. Mugdha Gadgil: Department of Sanskrit & Prakrit Languages, SPPU

Prof. G. U. Thite: Retd. Professor, Department of Sanskrit & Prakrit Languages, SPPU

Prof. S. G. Dani: TIFR, Currently: Centre for Excellence in Basic Sciences, Mumbai

Prof. S. A. Katre: Lokmanya Tilak Chair Professor, SPPU

Dr. Venketeswara Pai: Department of Humanities, IISER, Pune

Prof. M. S. Sriram: Retd. Professor, Dept. of Theoretical Physics, Univ. of Madras, Chennai

Outcomes:

At the end of the workshop, participants

1. have indeed benefitted from the workshop.
2. know the importance Ancient Indian Mathematics.
3. was able to understand the original Sanskrit texts of Aryabhata (476–550 CE), Sridharacharya (c. 750 CE – c. 930 CE), Mahaveeracharya (9th Century) and Bhaskaracharya (1114–1185).
4. got the importance of Siddhanta Shiromani of Bhaskaracharya viz. Grahadhyaya and Goladhyaya.
5. understood the development in mathematics from ancient time.

About Participants:

The workshop was open to all. We have shown the live telecast of workshop for our college students and faculties. The students of FY/SY B.Sc. was attended the live telecast of workshop. The list of Participants is included in Annexure A.

Acknowledgment:

The organizing committee is grateful to Dr. B.B. Waphare, Principal, MIT ACSC for allowing to show the live telecast of the workshop and motivating to us and students.

Support from Lab Assistant regarding projector installation requires a special mention. We thank Mr. Pankaj More who have make the necessary technical arrangement for the workshop. We also thank to Mr. Rutuj Deshmukh, Mr. Sandeep Muley who helped in internet related issues.

We thank the supporting staff: Ms. Jyoti Tapkir, , Mr. Shekhar Bhosale, Mr. Krishna Gundare for all the help they extended for the organizing the workshop.

Glimpse of Workshop:



Participants were watching live telecast of workshop



Participants were immersed in workshop



Participants were immersed in workshop



Group photo of participants at the end of workshop

Annexure A:

List of Participants who have actively participated in the live telecast of workshop on Ancient Indian Mathematics:

Sr. No.	Name	Class
1	MR. PRADIP DATTATRAYA PANSARE	Teacher
2	MR. SANJAY BABAN GUNJAL	Teacher
3	NITISH M. SHARMA	S.Y.B.Sc.
4	ITKHEDE AKSHAY TULSHIDAS	S.Y.B.Sc.
5	LOHAR PRAGATI DIGAMBAR	S.Y.B.Sc.
6	LABADE SONAL RAVINDRA	S.Y.B.Sc.
7	SHRADDHA BARBHAI	S.Y.B.Sc.
8	KADAM NIKITA JITENDRA	S.Y.B.Sc.
9	SHINGOTE APEKSHA S.	S.Y.B.Sc.

Mr. Pradip D. Pansare
Coordinator

Mrs. Vijayalaxmi M.K.
HOD, Mathematics

Dr. B.B. Waphare
Principal