



Shiv Chhatrapati Shikshan Sanstha's
Rajarshi Shahu Mahavidyalaya, Latur
(Empowered Autonomous Institution)
Department of Physics and Electronics
A) A Summary Report of the Activity

1) Title of Programme:		One-Day Workshop on “Ancient Indian Astronomical System” under the IKS Initiative of NEP-2020		
2) Name of Organizing Department:		Physics and Electronics		
3) Name of the Coordinator(s)/ Convener(s)/ Organizer(s) of the Programme:		Dr Abhijit Yadav, HoD - Physics and Electronics Dr Shilpa Patange (Teacher In-charge)		
4) Date of the Programme:		Tuesday, 29 th September 2026; 12:30 PM		
5) Venue:		Hall No. 306		
6) Target Group:		UG I, II, III and PG I, II		
7) Number of Participants:		Male	Female	Total
A separate list with signatures be maintained in the department/Unit)	Teaching	03	04	07
	Non-Teaching	01	--	01
	Students	05	26	31
8) Name(s) and details of Resource Person(s), if any:		Dr Mallikarjun Wakade Head and Assistant Professor, Department of Physics, Shivneri Mahavidyalaya, Shirur Anantpal, Dist. Latur		
9) Total Expenditure for the Programme:		₹ 1000		
10) Source of Funding:		Rajarshi Shahu Mahavidyalaya, Latur		

B) Report

i. Title: One-Day Workshop on “Ancient Indian Astronomical System” under the Indian Knowledge Systems (IKS) Initiative of NEP-2020

ii. Introduction:

The Department of Physics and Electronics organized a One-Day Workshop on “Ancient Indian Astronomical System” under the Indian Knowledge Systems (IKS) Initiative of NEP-2020 on Tuesday, 29th September 2026. The workshop was designed to acquaint UG and PG students with India's profound astronomical heritage, scientific methodologies, and mathematical foundations of celestial observation. Dr Mallikarjun Wakade, Head and Assistant Professor, Department of Physics, Shivneri Mahavidyalaya, Shirur Anantpal, Dist. Latur, was invited as the chief Resource Person.

iii. Objectives of the Workshop:

- To expose students to the scientific rigor, mathematical precision, and observational heritage of ancient Indian astronomy.
- To trace the historical evolution of Indian astronomical thought from Vedic literature and Vedanga Jyotisha to the classical era.
- To highlight the fundamental contributions of pioneering Indian scholars, including Aryabhata, Varahamihira, Brahmagupta, Bhaskaracharya I and II, etc.
- To explain the mathematical concepts behind timekeeping (Kalgayana), the Indian Luni-Solar Calendar (Panchanga), eclipses, cardinal directions, and celestial coordinate systems.
- To inspire students to integrate historical scientific traditions with modern physics, observational astronomy, and interdisciplinary research.

iv. Details of Participants:

A total of 39 participants, comprising 09 male and 30 female participants, including faculty members, students participated in the workshop.

v. Brief Summary of the Workshop

HoD Dr Abhijit Yadav delivered the welcome address and presented the concept note, explaining how the integration of IKS under NEP-2020 enriches the modern Physics curriculum. Prof. (Dr) Mahesh Wavare, Dean, Faculty of Science and Technology, felicitated the resource person, Dr Mallikarjun Wakade. The workshop was graced by

the special presence of the Placement Officer, Prof. Dr Nishank Pimple. Dr Shilpa Patange introduced the resource person, Dr Mallikarjun Wakade, highlighting his academic accomplishments and research expertise.

In his address, Dr Mallikarjun Wakade highlighted that India possesses an extraordinarily rich and ancient astronomical tradition deeply intertwined with human civilization. He emphasized that ancient Indian scholars did not merely view celestial events through a cultural lens, but conducted rigorous, mathematical, and observational analyses to construct sophisticated systems of time measurement, calendar formulation (Panchanga), seasonal tracking, and planetary dynamics.

The key highlights of Dr Wakade's lecture included:

1. Evolution from Vedic Astronomy & Vedanga Jyotisha: Tracing early observational techniques, daily solar movements, and astronomical time measurement.
2. Great Astronomers & Mathematical Breakthroughs: Elaborating on Aryabhata's foundational concepts of planetary motion and earth's axial rotation, followed by the groundbreaking works of Varahamihira, Brahmagupta, Bhaskaracharya I, and Bhaskaracharya II.
3. Scientific Principles of Eclipses: Explaining solar and lunar eclipses through shadow physics and orbital geometry, debunking myths with exact mathematical formulations.
4. Celestial Coordinate Systems & Constellations: Detailing the celestial sphere, horizon, meridian, pole star (Dhruvatara), cardinal directions, 12 zodiac signs (Rashi), and 27 lunar mansions (Nakshatras).
5. Luni-Solar Timekeeping & Panchanga: Demonstrating the mathematical relationship between Solar Day, Sidereal Day, Solar Year, Lunar Month, Intercalary Month (Adhikmas), Yuga cycles, and the astronomical basis of traditional Indian festivals.

The interactive session allowed students to actively engage with the Resource Person, asking questions regarding traditional observational instruments and calendar calculations. The program concluded with a formal vote of thanks proposed by Prof. Mahesh Balwade. Principal Dr Mahadev Gavhane extended guidance and encouragement for the event.

Additionally, the event was attended by faculty members including Prof. Mayuri Hawaldar; Prof. Vishakha Patil; Prof. Harshad Dalve; Prof. Harshada Nalage; Mrs. Rupali

Katkar; Mr. Mahesh Balwade; Dr Shilpa Patange; Shri Amar Bhoirwad; Shri Rajkumar Lokhande; and Shri Shyam Chochande.

vi. Conclusion and Future Outlook

The workshop successfully demystified ancient Indian astronomical concepts, highlighting their mathematical precision and empirical roots. It instilled a sense of scientific pride among participants while motivating students toward higher research in physics, astrophysics, and interdisciplinary knowledge systems under NEP-2020.

vii. Any Appendix If Necessary: List of students

Date: September 30, 2026

Place: Latur


HoD

HEAD

Department of Physics & Electronics
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)


Principal

PRINCIPAL

Rajarshi Shahu Mahavidyalaya
(Autonomous), Latur

C) Geotagged Photographs:



Prof. (Dr.) Mahesh Wavare, Dean, Faculty of Science and Technology, felicitating Dr. Mallikarjun Wakade.



Dr Abhijit Yadav, HoD, delivering the concept note.



Dr. Mallikarjun Wakade conducting the workshop.



Student Participants



Mr. Mahesh Balwade expressing the vote of thanks

D) Notice of the workshop:



Shiv Chhatrapati Shikshan Sanstha's
Rajarshi Shahu Mahavidyalaya, Latur
Empowered Autonomous Institution
Department of Physics and Electronics
Notice: Workshop on IKS

Date: 25-09-2026

All UG and PG students are hereby informed that the Department of Physics and Electronics is organizing a One-Day Workshop on "Ancient Indian Astronomical System" under the IKS Initiative of NEP-2020.

It is compulsory for all students to attend the programme and benefit from the valuable guidance and interaction with the distinguished guest.

Date: Tuesday, September 29, 2026

Time: 12:30 PM

Venue: Hall No. 306


Head

Department of Physics & Electronics

HEAD

Department of Physics & Electronics
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)


Principal

Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)

E) Banner of the workshop:



Shiv Chhatrapati Shikshan Sanstha's
Rajarshi Shahu Mahavidyalaya, Latur
Empowered Autonomous Institution
Department of Physics and Electronics

ONE-DAY WORKSHOP
ON
"ANCIENT INDIAN ASTRONOMICAL SYSTEM"
Under the IKS Initiative of NEP-2020
All UG and PG Students

RESOURCE PERSON
Dr Mallikarjun Wakade
Head and Assistant Professor,
Department of Physics,
Shivneri Mahavidyalaya, Shirur Anantpal,
Dist. Latur.

CHAIRPERSON
Dr Mahadev Gavhane
Principal

Tuesday, September 29, 2026 | 12:30 PM
Venue: Hall No. 306

Teacher In-Charge. **Dr Shilpa Patange** | HoD: **Dr Abhijit Yadav**



Shiv Chhatrapati Shikshan Sanstha's
Rajarshi Shahu Mahavidyalaya, Latur
(Empowered Autonomous Institution)
Department of Physics and Electronics
Workshop on IKS

Date: 29.09.2026

Time: 12.30 PM

Sr. No.	Name	Gender	Class	Signature
1.	chakre Sanchita Monuti	Female	BA-1 Y	<u>Sanchita</u>
2.	Shinde Mamta Prakash	-11-	-11-	<u>Mamta</u>
3.	Sayyeeel Sadaf Farukh.	-11-	B.A.Ay.	<u>Sadaf</u>
4.	Sayyeeel Saniya Khayyum.	-11-	B.A.Ay.	<u>Saniya</u>
5.	Shindebone Shroaddha Govind	-	B.A.f.y	<u>Shroaddha</u>
6.	Shembre Anadi Eknath	-11-	B.A.Fy	<u>Anadi</u>
7.	Ustree Peachi Sudhite	-11-	B.Sc 3Y	<u>P.</u>
8.	Dhanve Sakshi Vijanath	-11-	BSC TY	<u>Sakshi</u>
9.	Wangwad Trupti Ramdas	-	MSc F.Y.	<u>Trupti</u>
10.	Maske Prerna Tukaram	Female	M.Sc F.Y	<u>Prerna</u>
11.	Gitte Vaishnavi Ramkishan	-	M.Sc Sy	<u>Vaishnavi</u>
12.	Jumarfizi Sheesta Hussain	-	M.Sc Sy	<u>Sheesta</u>
13.	Patil Samiksha Sanjay	-11-	B.Sc FY	<u>Samiksha</u>
14.	Kolshetti Santosh Jankumar	Male	M.Sc F.Y	<u>Santoshi</u>
15.	Rushikesh Sadyawan Burbure	Male	M.Sc F.Y	<u>Rushikesh</u>
16.	Landge Mahesh Pandhari	-11-	B.Sc.T.Y	<u>Mahesh</u>
17.	Dalve Sachin Vishwanath	-11-	B.Sc.T.Y	<u>Sachin</u>
18.	Pedate Rushikesh Prateep.	-	B.Sc.Fy	<u>Rushikesh</u>
19.	Kalam Charushila Ravindra	Female	M.Sc.II	<u>Kalam</u>
20.	Deshmukh Suhani . V	-11-	-11-	<u>Suhani</u>
21.	Birajdar Sneha . A	-11-	-11-	<u>Sneha</u>

22.	Sarge Bhagyaashree . L	female	M.Sc II	~~Shargyaashree~~
23.	Shaikh Mahak	female	M.Sc I	~~Shaikh~~
24.	Dhoks Geeta Vyankat	Female	M.Sc. I	~~Geeta~~
25.	Sayyad Nirhat Ajeem	Female	M.Sc. I	~~Nirhat~~
26.	Shaikh Tamanna N.	Female	M.Sc I	~~Tamanna~~
27.	Gore Anjali Nagnath	Female	M.Sc-I	~~Anore~~
28.	Gore Neha Nagnath	Female	M.Sc-I	~~Nore~~
29.	Deshmukh Sakshi Anantrao	Female	M.Sc. I	~~Sakshi~~
30.	Jadhav Punam Rajendra	Female	M.Sc-I	~~Punam~~
31.	Sayyed Mahak Najib	Female	M.Sc I	~~mahek~~
32.	Mahesh Balaji Balwade	male	Asst. professor	~~msb~~
33.	pratiksha Motiram kope	Female	Asst. prof	~~Pratiksha~~
34.	Miss Mayuri V. Hawalder	Female	Asst. Prof	~~Mayuri~~
35.	Miss Vishakha B. Patil	female	Asst. prof	~~Vishakha~~
36.	Miss Harshada S. Nalge	Female	Asst. Prof	~~Harshada~~
37.	Mr. Harshad N. Dalve	Male	Asst. prof	~~Harshad~~
38.	Mr. Ghoinwad A. H.	-11	Lab. As.	~~A. H.~~
39.	Dr. A. A. Yadav	male	prof.	~~Sadp~~
40.		SM - 5	TM - 3	NTM - 01
41.		SF - 26	TF - 4	
42.		31	7	5
43.				
44.				
45.	HEAD		PRINCIPAL	
46.	Department of Physics & Electronics Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)		Rajarshi Shahu Mahavidyalaya, Latur (Autonomous)	
47.				