



# DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

## Syllabus of the Minor Subject History of Science and Technology in Ancient India For First and Second year of B.A./B.Sc./B.Com

Syllabus Developed by				
SN	Name of Expert/BoS Member	Designation	Department	College/ University

Programme/Class: Certificate		Year: First	Semester: I and II
Subject: Minor (Elective)			
Course Code: M040103T		Course Title: History of Science and Technology in Ancient India	
Credits: 05		Minor / Elective	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0			
Unit	Topics	No. of Lectures	
I	<b>Indus Civilization</b> 1. Metallurgy, 2. Mathematics and Astronomy, 3. Town Planning, 4. Flora and Fauna	20	
II	<b>A brief History of Astronomy in Ancient India</b> 1. Vedic Period, 2. Vedānga, 3. Classical Age	17	
III	<b>A brief history of Chemistry in Ancient India upto NBPW Period</b> 1. Metallurgy: Copper in Chalcolithic to pre-NBPW Period, 2. Iron Technology from earliest time to NBPW Period, 3. Glass: Technology from earliest time to NBPW Period	21	
IV	<b>An Outline of the development of Mathematics in Ancient India up to Gupta Period.</b> 1. Bakśāli Mathematics 2. Geometry 3. Algebra 4. Arithmetic	17	

### Recommended Readings :

1. Hegde, K.T.M., An Introduction to Ancient Indian Metallurgy, Bangalore, 1991.
2. Hodges, H., Technology in the Ancient world, London, Pelican, 1970.
3. Kutumbia, P., Ancient Indian Medicine, New Delhi, 1962.
4. Prasad, G., Bhāratīya Jyotis a Kā Itihāsa, Lucknow, 1974.
5. Randhawa, M.S., A History of Agriculture in India, New Delhi, 1980.
6. Rose, D.M. et al., Concise History of Science of India, New Delhi, 1971.
7. Satya Prakash, Prācīna Bhārata mem Rasāyan Kā Vikāsa (Hindi), Varanasi, 1960.
8. Satya Prakash, Vaijñānika Vikāsa kī Bhāratīya Paramparā (Hindi), Patna, 1954.

9. Sen, S.N., Vijñāna kā Itihāsa, Two Volumes, Patna, 1972.
10. Singh, A.N. and Dutta, B.B., History of Hindu Mathematics (English and Hindi). Vols. I and II, Lahore, 1935 and 1938.
11. Tripathi, Vibha. The Age of Iron in South Asia : Legacy and Tradition. Delhi. 2001.

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*V.K. Singh*  
*2/7/22*