



GOUR MAHAVIDYALAYA, MANGALBARI, MALDA



THE DEPARTMENTS OF HISTORY AND SANSKRIT OFFER ADD-ON-COURSE ENTITLED
"INDIAN KNOWLEDGE SYSTEMS"

ADD-ON-COURSE: INDIAN KNOWLEDGE SYSTEMS: OBJECTIVES

The objectives include: *Provide a general introduction to IKS and help students develop a perspective on it; *Help students apply IKS to their daily lives; *Sensitizing students to the contributions of Indians in science and technology; *Developing a readiness to undertake reforms and innovations in the practice of IKS; *Broadening intellectual horizons and boosting self-assurance; * Help students to gain insights into conducting research and verifying Indian Knowledge Systems; * Provide an opportunity to the students to enhance their knowledge concerning Indian Knowledge Systems.

Course duration: 30 hours

SÝLLABUS

The following syllabus has been prepared:

Fundamentals: An overview of Indian contributions to technology

- **Technological Innovations**
- **2. Metallurgy, Textile and Chemistry Copper/Bronze/Zinc: Important Mines (Zawar, Khetri mines)**
- **Iron and Steel Technology**
- **Textile and Dyeing- Indian Specialties (Kutchi Embroidery, Cotton Textile etc.)**
- **Chemistry**
- **3. Pyro technology Ceramic Technology**
- **Stone (Lapidary)**
- **Shell, Ivory, Faience& Glass Technology**
- **4. Water Management Overview**
- **Harappan and Traditional Water Management System of Gujarat**
- **Historical Sites- Sringeverpur, South Indian Water Management System, Western**
- **Ghats Cave- Kanheri etc. Medieval Period**
- **Communities Involved in Water Management.**
- **5. Mathematics an overview of the Development of Mathematics in India:**
- **Mathematics contained in the Sulbasutra.**
- **Weaving Mathematics into Beautiful Poetry- Bhaskaracarya.**

- **The Evolution of Sine Function in India.**
- **The Discovery of Calculus by Astronomers.**
- **Concept of proof in Indian mathematics.**

6. Astronomy Vedanga Jyotish:

- **Measuring Time.**
- **Calendar.**

7. Medical science and its evolution:

- **Basic concepts of Ayurveda.**
- **Ayurveda ethics and code of conduct rules.**

8. Ecology and Environment Nakshatrara Gyaan and Agriculture.

- **Indigenous Architecture.**
- **Forest Management and Urban Planning.**
- **Agroforestry.**
- **Tank, Lakes, and Stepwells.**

9. Transportation Modes of Transportations and Reforms

DATE	TIME	Topic	Name of Teacher
18.11.20 24	4 P.M.- 5P.M. ROOM NO.305	Fundamentals : An overview of Indian contributions to technology <ul style="list-style-type: none"> • Technological Innovations • 2. Metallurgy, Textile and Chemistry Copper/Bronze/Zinc: Important Mines (Zawar, Khetri mines); • Iron and Steel Technology	Dr.P.K.Kundu, Associate Professor
19.11.20 24	4 P.M.- 5P.M	<ul style="list-style-type: none"> • Textile and Dyeing- Indian Specialities (Kutchi Embroidery, Cotton Textile 	Dr.P.K.Kundu, Associate Professor

		etc.)	
20.11.2024	4 P.M.- 5P.M	<ul style="list-style-type: none"> • Chemistry • 3. Pyro technology Ceramic Technology • Stone (Lapidary) • Shell, Ivory, Faience& Glass Technology 	Dr.P.K.Kundu, Associate Professor
21.11.2024	4 P.M.- 5P.M	4. Water Management Overview <ul style="list-style-type: none"> • Harappan and Traditional Water Management System of Gujarat 	Dr.P.K.Kundu, Associate Professor
22.11.2024	4 P.M.- 5P.M	<ul style="list-style-type: none"> • Historical Sites- Sringeverpur, South Indian Water Management System, Western • Ghats Cave- Kanheri etc. Medieval Period • Communities Involved in Water Management. 	Dr.P.K.Kundu, Associate Professor
23.11.2024	4 P.M.- 5P.M	5. Mathematics An overview of the Development of Mathematics in India: <ul style="list-style-type: none"> • Mathematics contained in the Sulbasutra. • Weaving Mathematics into Beautiful Poetry- Bhaskaracarya. 	Dr.P.K.Kundu, Associate Professor,History
25.11.2024	4 P.M.- 5P.M	<ul style="list-style-type: none"> • The Discovery of Calculus by Astronomers. • Concept of proof in Indian mathematics. 	Rakesh Sarkar,Assistant Professor in Mathematics
26.11.2024	4 P.M.- 5P.M	6. Astronomy Vedanga Jyotish: <ul style="list-style-type: none"> • Measuring Time. • Calendar. 	DR.Bijay Ghosh,SACT,Sanskrit
27.11.20	4 P.M.-	.Medical science and its	DR.Bijay

24	5P.M	evolution: <ul style="list-style-type: none"> • Basic concepts of Ayurveda. • Ayurveda ethics and code of conduct rules. 	Ghosh,SACT,Sanskrit
28.11.20 24	4 P.M.- 5P.M	8. Ecology and Environment Nakshatrara Gyaan and Agriculture.	Dr.P.K.Kundu, Associate Professor,History
29.11.20 24	4 P.M.- 5P.M	• Indigenous Architecture.	Dr.P.K.Kundu, Associate Professor,History
30.11.202 4	4 P.M.- 5P.M	• Forest Management and Urban Planning	Dr.P.K.Kundu, Associate Professor,History
01.12.202 4	3 P.M.-4 P.M.	Science and Technology in Early Medieval and Medieval India	MdNasiruddin Ahmed,Assistant Professor, Brahmananda Kesab ChandraCollege,Bon Hooghly,Baranagar,Kolkata.
2.12.202 4	4 P.M.- 5P.M	Forest in Ancient India	Dr.P.K.Kundu, Associate Professor,History
3.12.202 4	4 P.M.- 5P.M	Indian Knowledge Systems	Dr.Taraknath Adhikari,Ex-Professor in Sanskrit,Rabindra Bharati University,Kolkata
4.12.202 4	4 P.M.- 5P.M	Forest Management in Modern India	Satyajit Paul,Assistant Professor in Geography
5.12.202 4	4 P.M.- 5P.M	Mathematics,Brahmagupta,Gwalior Inscription, Bashkhal Manuscript	Rakesh Sarkar,Assistant Professor in Mathematics
6.12.202 4	4 P.M.- 5P.M	• Agroforestry.	Satyajit Paul,Assistant Professor in Geography
7.12.202 4	4 P.M.- 5P.M	Agricultural Technology in Ancient India,Early Medieval India	DR.S.Biswas,Associate Professor,History
9.12.202 4		Small Pox and Innoculation	Dr.P.K.Kundu,

			Associate Professor,History
10.12.2024		Sociological Perspective of Ancient Indian Town Planning	Urmimala Basak Ray, Assistant Professor in Sociology
11.12.2024		Herbal medicines	Doyel Ray, Assistant Professor in Botany
12.12.2024		• Tank, Lakes, and Stepwells	Dr.P.K.Kundu, Associate Professor,History
13.12.2024		Ancient India: Transportation Modes of Transportations and Reforms	Dr.P.K.Kundu, Associate Professor,History
14.12.2024		Early Medieval India: Transportation Modes of Transportations and Reforms	Dr.P.K.Kundu, Associate Professor,History
16.12.2024		Transportation Modes of Transportations and Reforms	Satyajit Paul, Assistant Professor in Geography
17.12.2024		Examination-100 Marks-MCQ	3 P.M.-5 P.M.

BOOKS:

Ancient Hindu Science- Alok Kumar

Indian Knowledge System-Dr.G.C.Wadhawa

The Ancient Ayurvedic Writings- M.Dick

An Introduction to Indian Philosophy- Satishchandra Chatterjee

Rediscovering Indian Knowledge System- Pranay Abhang , Pramod Moghe , Pra

Science and Technology in Ancient Indian Texts- Bal Ram Singh , Nath Girish

Ancient Indian Knowledge System : Archaeological Perspective-Basant Shinde

ANCIENT INDIAN INSIGHTS AND MODERN SCIENCE- KALPANA PARANJAPE

Exploring Science in Ancient Indian Texts-B.R.Singh

History of Ancient Indian Medical Science- Gurupada Sarma Halder

The Archaeology of Ancient Indian Cities- Dilip Kr. Chakrabarti

Ancient Indian Science and its Relevance to the Modern World-

PROF. K.E. GOVINDAN



Natural Science Of The Ancient Hindus-S.N.Dasgupta

INTRODUCTION TO INDIAN KNOWLEDGE SYSTEM: CONCEPTS AND APPLICATIONS- Madhaban

History of Hindu Chemistry-Prafulla Chandra Ray

Water Management in Ancient India-Michel Danino

Irrigation in India- Kathakali and Bagchi

Forest and Environment in Ancient India- V.K.Gupta

Registration Form for ADD-ON COURSE
ON

INDIAN KNOWLEDGE SYSTEM

Session-2024-2025

Organised by

Department of History and Sanskrit
Gour Mahavidyalaya, Mangalbari, Malda

NAME (IN Capital): SONALI BANERJEE
Father's /Guardian Name: RAKESH BANERJEE
Semester/Year: 3rd Sem.
Roll No: 1230406
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Date: 28/11/2024

Sonali Banerjee
28/11/2024
Signature of the Applicant

Student Name	Date	Rank	Department	Roll Number
Arundhanti	18/11/24	1st	Sanskrit	6237326540
Ananda Mandal	18/11/24	1st	Sanskrit	8652904328
Anand Mandal	18/11/24	1st	Sanskrit	6237430370
Anita Choudhary	18/11/24	1st	Sanskrit	7585014547
Arundhanti Choudhary	18/11/24	1st	Sanskrit	960800858
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8918250780
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8116797797
Arundhanti Choudhary	18/11/24	1st	Sanskrit	0332051880
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8538077782
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8348919261
Arundhanti Choudhary	18/11/24	1st	Sanskrit	6653903390
Arundhanti Choudhary	18/11/24	1st	Sanskrit	9939406343
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7501702617
Arundhanti Choudhary	18/11/24	1st	Sanskrit	6205296936
Arundhanti Choudhary	18/11/24	1st	Sanskrit	9635004314
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8670902236
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7384152578
Arundhanti Choudhary	18/11/24	1st	Sanskrit	9883929501
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7318597196
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8456810644
Arundhanti Choudhary	18/11/24	1st	Sanskrit	9832753714
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7501331095
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7478263273
Arundhanti Choudhary	18/11/24	1st	Sanskrit	9832217014
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8348271230
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7733409244
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8327883779
Arundhanti Choudhary	18/11/24	1st	Sanskrit	758982892
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8538098524
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7501250081
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8010910499
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8509725095
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7063552866
Arundhanti Choudhary	18/11/24	1st	Sanskrit	70080735
Arundhanti Choudhary	18/11/24	1st	Sanskrit	8509769990
Arundhanti Choudhary	18/11/24	1st	Sanskrit	7602362771

Arundhanti

