

Dr. B.R. Ambedkar Satabarshiki Mahavidyalaya, Helencha



P. N. Das College, Palta

Ref. No. 101/23

Date: 10.06.2023

NOTICE

It is to inform all concerned that classes of **ADD-ON course** on **Ancient Indian Knowledge System** will commence on and from 15.06.2023 as per the time table attached herewith. At the end of the course there will be an assessment to evaluate and assess the learning level/course outcome of the students and every successful candidate shall be provided certificate after that. Class Routine, Syllabus and other details are attached herewith. Classes shall be taken as per the modules mentioned against each course.

Name of the Course Co-ordinator-

Joint Co-ordinators : 1. Dr. Roopleena Banerjee, Mob No-9830893486
2. Dr. Madhuchhanda Lahiri, Mob No- 9433264133

Sd/

Dr Chittaranjan Das
Principal, DRBRASM, Helencha

Sd/

Dr. Sharmila De
Principal, PNDC, Palta

Copy to:

1. College Website
2. AIMS Portal
3. Notice Board
4. Telegram Group
5. Concerned W/A groups

TIME TABLE FOR ADD-ON COURSE ON AIKS

SL NO	DATE	TIME	TOPIC
1	15.06.2023	6PM-8PM	MODULE-III-DC
2	16.06.2023	5PM-7PM	MODULE-V-KSB
3	17.06.2023	5PM-7PM	MODULE-IV-GB
4	18.06.2023	4PM-6PM	MODULE-II-CRD
5	19.06.2023	4PM-5PM	MODULE-I-KKB
6	19.06.2023	5PM-6PM	MODULE-I- SDE
7	20.06.2023	5PM-7PM	MODULE-IV-AM
8	21.06.2023	5PM-7PM	MODULE-III-LP
9	22.06.2023	5PM-6PM	MODULE-IV-AM
10	22.06.2023	6PM-7PM	MODULE-IV-GB
11	23.06.2023	3PM-5PM	MODULE-I-KKB
12	24.06.2023	6PM-8PM	MODULE-III-SR
13	25.06.2023	4PM-6PM	MODULE-II-CRD/MG
14	26.06.2023	4PM-6PM	MODULE-V-SRB
15	27.06.2023	3PM-5PM	MODULE-V-MM
16	28.06.2023	3PM-5PM	MODULE-VI-BB
17	29.06.2023	3PM-5PM-	MODULE-V-SRB
18	30.06.2023	4PM-6PM	MODULE-VI-BB
19	30.06.2023	6PM-7PM	EXAM

Sd/
Principal
DRBRASM

Sd/
Principal
PNDC



ADD-ON COURSE

ON

ANCIENT INDIAN KNOWLEDGE SYSTEM

Knowledge does much more than just help students hone their thinking skills. It actually makes learning easier. Knowledge is not only cumulative, it grows exponentially. Those with a rich base of factual knowledge find it easier to learn more-the rich get richer.

It is important to know the history of our country to explore our identity as a nation. It teaches us to value our culture and heritage and feel proud as a nation; it is not to have a debate on claims of the discoveries and inventions but to be proud that history proves that our civilization had made advancement in the field of Science and Technology, Medicine and Mathematics.

Indian society is a treasure trove of knowledge, gained over thousands of years, manifested in the form of arts, literature, traditions, customs, languages, architecture etc and exhibited in systematized ways of knowing. Starting from the oldest compositions of knowledge, the Vedic literature to the country's native and tribal folklore, the Indian Knowledge is spread as a spectrum. Ancient practices developed by Indians over the centuries were passed on from one generation to another.

We owe a lot to the ancient Indians, teaching us how to count. Without which most modern scientific discoveries would have been impossible. - Albert Einstein

However, this process of inter-generational transfer of information ended abruptly in the last centuries. The National Education Policy 2020 lays special emphasis on the promotion of Indian Languages, Arts and Culture, and tries to remove this discontinuity in the flow of Indian Knowledge System by integrating IKS into curriculums at all levels of education. The success of NEP 2020 and its special component on Indian Knowledge System relies heavily on the shoulder of the faculty of Higher Education Institutions.

Before the full-fledged implementation of the NEP 2020 in our country to inspire the faculties and students in higher education institutions, to generate a positive attitude towards IKS and promote interest in knowing and exploring more on this, to make our youth aware of the vast repositories of ancient traditional knowledge in India and clearly map this knowledge with modern scientific

advancements and technologies Dr. B. R. Ambedkar Satabarshiki Mahavidyalaya, Helencha, North 24 PGS in collaboration with P.N.DAS college, Palta , North 24 PGS has proposed an Add-on Course on “**Ancient Indian Knowledge System**” to be conducted via Online mode involving students from both the institutions as the part of the MoU signed between these two HEIs.

The main purport of this course is to discuss and present the facts supported by documentary and scriptural evidences but not fabricated and mythological inputs available as heresay.

Chief Patron:

1. **Dr. Sharmila De, Principal, PNDC**
2. **Dr. Chittaranjan Das, Principal, DRBRASM**

Faculties assigned to this Course:

1. Dr. K.K Bardhan, Retired Scientist, Saha Institute of Nuclear Physics
2. Dr. Sharmila De, Principal, PNDC
3. Dr. Chittaranjan Das, Principal, DRBRASM
4. Dr. Dipa Chakraborty, Associate Professor, Philosophy, PNDC
5. Smt. Srijani Ray, Assistant Professor, Philosophy, DRBRASM
6. Smt. Latika Patel, Assistant Professor, Philosophy, DRBRASM
7. Dr. Ata Mallick, Assistant professor, History, DRBRASM
8. Dr. Gautam Biswas, Assistant Professor, History, PNDC
9. Sri Suman Ranjan Bandyopadhyay, Assistant Professor, English, PNDC
10. Dr. Bablu Biswas, Assistant Professor, Mathematics, PNDC

Course Coordinators:

11. Dr. Roorpleena Banerjee, Coordinator, IQAC, DRBRASM
12. Dr. Madhuchhanda Lahiri, Coordinator, IQAC, PNDC

Curriculum planning and design:

Indian Science & Technology:

1. Dr. K.K Bardhan, Retired Scientist, Saha Institute of Nuclear Physics
2. Dr. Sharmila De, Principal, PNDC

Medical Science in Ancient India:

1. Dr. Chittaranjan Das, Principal, DRBRASM

Indian Philosophy & Indian Logic:

1. Dr. Dipa Chakraborty, Associate Professor, Philosophy, PNDC
2. Smt. Srijani Ray, Assistant Professor, Philosophy, DRBRASM
3. Smt. Latika Patel, Assistant Professor, Philosophy, DRBRASM

Indian History:

1. Dr. Ata Mallick, Assistant professor, History, DRBRASM
2. Dr. Gautam Biswas, Assistant Professor, History, PNDC

Indian Literature:

1. Sri Suman Ranjan Bandyopadhyay, Assistant Professor, English, PNDC

Vedic Mathematics:

1. Dr. Bablu Biswas, Assistant Professor, Mathematics, PNDC

A. Syllabus for Indian Science & Technology (6 Classes) MODULE-I

1. History of Indian Science
2. History of Indian Technology
3. India and the World

Suggested Readings:

1. Singh, Bal Ram, Jha, Girish Nath, Singh, Umesh Kumar & Mishra Diwakar: Science and Technology in Ancient Indian Texts.
2. Bharati, Vijnana: Indian Contribution to Science.
3. Pujari, R.M, Kolhe, Pradeep, Kumar, N.R.: Pride of India: A Glimpse in to Indian Scientific Heritage.
4. Subbarayappa, B.V.: Science in India: A Historical Perspective.

B. Syllabus for Medical Science in Ancient India MODULE-II (Total 4 classes)

1. **What are the eight branches of Ayurveda:**
 - a. Kaya Chikitsa- Medicine.
 - b. Shalya Tantra- Surgery.
 - c. Shalakya Tantra- ENT and Ophthalmology.
 - d. Kaumarbhritya- Paediatrics and Obstetrics.
 - e. Agad Tantra- Toxicology.
 - f. Bhut Vidya- Psychiatry.
 - g. Rasayan- Rejuvenation therapy and geriatrics.
 - h. Vajikaran- Sexology (Including Aphrodisiac for better progeny)
2. **Contribution of Charak to the field of Medicine.**
3. **Contribution of Sushruta to the field of Medicine.**
4. **Development of Ayurveda during Buddhist Age.**
 - a. **Jivaka**
 - b. **Nagarjuna**

Reference:

1. Macdonell,A.A- A History of Sanskrit Literature
2. Chattopadhyay, Prabhakar- History of Ayurveda
3. Kaviratna,A.C.- Charak Samhita and Sushruta Samhita

C. Syllabus for Indian Philosophy (6 Classes) MODULE-III

Topic:	Duration of Topic
1. Thenature and forms of knowledge.	
● Concept of Prama, Pramana and Aprama , classification of Aprama	1hr
2. Perception.	1hr
● Definition & Classification of Perception	
● Buddhist view of Perception& Inference	
3. Nature of Inference	2hr
● Classification of Inference	
● Fallacies of Inference	
4. Comparisonand Testimony 1hr	
● Nature and forms of Comparison	
● Can comparison be reduced to any other pramana?	
● Nature and classification of Testimony	
● Pada and Bakya	
5. Arthapatti, Anupalabdhi, Pramanyavada 1hr	
● Definition of Arthapatti	
● Nyaya view on Arthapatti	
● Nature of Anupalabdhi	
● Is Anupalabdhi a distinct source of knowledge?	
● Svatapramanyavada and Paratapramanyavada.	

Suggested Readings

- C.D. Sharma, A Critical Survey of Indian Philosophy.
D.M. Dutta, **Six** Ways of Knowing
D.M.Dutta and Chatterjee, An Introduction to Indian Philosophy
Debabrata Sen, *BharatiyaDarsan*
Hiriyana, Outlines of Indian Philosophy
Dipak Kumar Bagchi, *BharatiyaDarsan*
J.N. Mohanty, Classical Indian Philosophy
Karuna Bhattacharya, *Nyaya VaisesikaDarsan*.
Prodyot Kumar Mondal, *BharatiyaDarsan*.
S.C. Chatterjee, *Nyaya Theory of Knowledge*.
S.N. Dasgupta, *History of Indian Philosophy*.
Sukhamoy Bhattacharya, *PurvamimamsaDarsan*.
Sukomal Choudhury, *GoutamBuddher Dharma Darsan*
T. R.V. Murti, *Central Philosophy of Buddhism*

D. Syllabus for Indian History (6 Classes)

MODULE-IV

1. **Education in Ancient India:** In this lecture, the age old principles and practices of the Gurukuls and Patshalas that prevailed all over India will be discussed.
2. **Women in Ancient India:** In this lecture, the place and role of women in early Indian society will be discussed.
3. **History of Science in India:** In this lecture, we will discuss India's contributions to the world of science are generally either under-represented or misrepresented. In this lecture, we will discuss a general historical context to developments in astronomy, mathematics and chemistry.
4. **History of Technology in India:** In this lecture, we will discuss the agricultural system, urbanism, early craft techniques and metallurgy. We will also cover topics such as constructions, transport, textiles, paper and writing, along with some miscellaneous technologies.
5. **Historical Evolution of Medical Tradition in India:** In this lecture, we will cover many health-related topics, Ayurveda and other forms of traditional Indian medicine, by discussing the prominent Ayurvedic acharyas and texts of the ancient period.
6. **The Indus-valley Civilization:** In this lecture, we will introduce students to the first civilization on the Indian Subcontinent, its main features and achievements, especially in the fields of urbanism and technology.

References:

Bhardwaj, Manohar. *History of Science and Technology in Ancient India*, Bookwin, New Delhi, 2010

Mazumder, Nogenra Nath, *A History of Education in Ancient India*, Macmillan, Calcutta, 1916

Mookherji, Radha Kumud, *Ancient Indian Education: Brahmanical and Buddhist*, Macmillan, London, 1947

Singh, Upinder, *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, Pearson Education India, New Delhi, 2009

Kenneth G. Zysk, *Religious Medicine: History and Evolution of Indian Medicine*, Routledge, UK, 2017

E. Syllabus for Indian Classical Literature (8 Classes) MODULE-V

Group A (Background)

1. Background discussion on Indian epic, themes and recension, classical Indian drama, theory and praxis, alamkara and rasa (2 Hours)

Group B (Texts)

1. Vyasa, 'The Book of the Assembly Hall' in Mahabharata, trans & ed. J.A.B Buitenen: 'The Book of the Assembly Hall' - The Dicing (Chapters 43-65) (4 Hours)
2. Banabhatta, Kadambari, trans. Padmini Rajappa: Prologue & Chapter I (Parrot Speaks) (2 Hours)

SUGGESTED READINGS

- Bharata, Natyashastra, tr. Manomohan Ghosh, vol. I, 2nd edn (Calcutta:Granthalaya, 1967) chap. 6: 'Sentiments', pp. 100–18.
- Chaturvedi Badrinath, The Mahabharata: An Inquiry in the Human Condition (Hyderabad: OBS, 2007)
- Irvati Karve, 'Draupadi', in Yuganta: The End of an Epoch (Hyderabad: Disha,1991) pp. 79–105.
- J.A.B. Van Buitenen, 'Dharma and Moksa', in Roy W. Perrett, ed., Indian Philosophy, vol. V , Theory of Value: A Collection of Readings (New York: Garland,2000) pp. 33–40.
- Vinay Dharwadkar, 'Orientalism and the Study of Indian Literature', in Orientalism and the Postcolonial Predicament: Perspectives on South Asia, ed. Carol A. Breckenridge and Peter van der Veer (New Delhi: OUP, 1994) pp. 158–95.
- Sheldon Pollock, ed & trans, A Rasa Reader: Classical Indian Aesthetics (Hyderabad: OBS, 2017 Indian ed).

F. Syllabus for Vedic Mathematics (4 Classes) **MODULE-VI**

1. History of Vedic maths, why Vedic maths, salient features of Vedic maths, Vedic maths formulas, Some Sutras, terms and operations. 1 hour
2. High speed addition by using the concept of computing the whole and from left to right , super fast subtraction by Nikhilam Sutram. 1 hour
3. Multiplication by Urdhavtrigbhyam sutram, multiplication by Vinculum sutram, multiplication by Nikhilam sutram, fast multiplication by 11, multiplication of numbers consisting of all 9s, multiplication of numbers nearest to the base 10. 1 hour
4. Meaning of Ekadhiken Sutram and its applications in finding squaring of numbers ending in 5, squares by Anurupeyana Sutram, square by Yavdunam thavadunikritya vargamcha yojyeta sutram. 1 hour

Suggested Readings:

1. Williams K.R. “Discover Vedic Mathematics” Vedic Mathematics Research Group, 1984.ISBN 1-869932-01-3.
2. Wiliams K.R. and M.Gaskell “The Cosmic Calculator”. Motilal Banarsidass ,2002.ISBN 81-208-1871-7.