

# Newsletter

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## Nehru Centre



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## Events At a Glance...

### Culture Wing

शब्द सुरांची भावयात्रा

**An Evening of Marathi  
Ghazals**

by **Shri Bhimrao Panchale  
and Dr Bhagyashree  
Panchale**

**Saturday, 18th March 2023  
7.00 p.m.  
Nehru Centre Auditorium**

### Library

#### BOOK DISCUSSION

**The Extraordinary Epoch  
of Nansahab Peshwa**

Written by  
**Dr Uday S. Kulkarni**

Speakers  
**Dr Uday S. Kulkarni  
Dr Gaurav Gadgil  
Shri Amit Paranjape**

**Wednesday, 29th March 2023  
4.30 p.m.  
Hall of Harmony  
Ground Floor,  
DOI Building**

## Constituent Assembly Debates Adult Franchise and Elections – Part II

When Article 289 was placed before the Constituent Assembly on June 15, 1949, it had been substantially changed by Dr. Ambedkar through his own amendment. The change was that instead of one Commission to deal with the elections to the Central Legislature and a separate Election Commission for each province and each State, as proposed in the original Article 289, the revised Article proposed to centralize the election machinery in the hands of a single commission to be assisted by regional Commissioners, not working under the provincial government, but working under the superintendence and control of the Central Election Commission.

Clarifying the reasons for this drastic change, Dr. Ambedkar said, "This change has become necessary because today we find that in some of the provinces of India, the population is a mixture. There are what may be called original inhabitants, so to say, the native people of a particular province. Along with them, there are other people residing there, who are either racially, linguistically or culturally different from the dominant people who are the occupants of that particular province. It has been brought to the notice both of the

Drafting Committee as well as of the Central Government that in these provinces the executive Government is instructing or managing things in such a manner that those people who do not belong to them racially, culturally or linguistically, are excluded from being brought on the electoral rolls. The House will realise that franchise is a most fundamental thing in a democracy. No person who is entitled to be brought into the electoral rolls on the grounds which we have already mentioned in our Constitution should be excluded merely as a result of the prejudice of a local Government, or the whim of an officer. That would cut at the very root of democratic Government... Therefore, this new change has been brought about, namely, that the whole of the election machinery should be in the hands of a Central Election Commission which alone would be entitled to issue directives to returning officers, polling officers and others engaged in the preparation and revision of electoral rolls so that no injustice may be done to any citizen of India."

On account of this, the revised Article 289 read as follows:

'The superintendence, direction and control of the preparation of the

electoral rolls for, and the conduct of all elections to Parliament and to the Legislature of every State and of elections to the offices of President and Vice-President held under this Constitution, including the appointment of election tribunals for the decision of doubts and disputes arising out of or in connection with elections to Parliament and to the Legislatures of States shall be vested in a Commission (referred to in this Constitution as the Election Commission) to be appointed by the President.'

[Note: There were four other clauses under this Article dealing with various details like the term of office, service conditions etc. which need not be included here.]

During the debate that followed, the revised Article 289 was criticized on two counts. First, that the amended Article did not make the Election Commission sufficiently independent, as the Central Government could influence it in a manner prejudicial to fair elections, and, second, that it was a trespass on provincial autonomy.

Shri K. M. Munshi, who strongly supported the amended Article, denied both. He said, "The amendment which has finally emerged from the Drafting Committee makes it clear that neither the Central Government nor the provincial Governments will have anything to do with the election. The Chief Election Commissioner, as the House will find, is practically independent. No doubt he is appointed by the President, that is, the Central Government but there can be no

other authority, no higher authority in India than the President for appointing the Tribunal." As to the second criticism that the amendment whittled down provincial autonomy, Shri Munshi said, "This argument has the knack of appearing again and again in respect of almost every Article, and I think it is high time that those honourable Members of the House who put it forward reconcile themselves to the position that the House has taken the line more suited to the country rather than the doctrinaire views of theoretical writers on federalism." He reminded the House that the idea of an Election Commission was put forward by the Fundamental Rights Committee and said, "It was unanimously accepted by the Advisory Committee and again it was accepted unanimously by the House. Therefore, it must be treated as the opinion of the House, and the country as a whole that matters of election must be taken out of the purview of the Centre and the provinces with a view to meet the realities of the situation." After Shri Munshi's strong rebuttal, the revised Article 289 of the Draft Constitution was adopted. However, in the context of Article 289, Dr. Ambedkar moved two new Articles viz. 289A and 289B.

Article 289A stipulated thus: "No person to be ineligible for inclusion in, or to claim to be excluded from, the electoral roll on grounds of religion, race, caste or sex. There shall be one general electoral roll for every territorial Constituency for election to either House of Parliament or to the House or either House of the Legislature of a State

and no person shall be ineligible for inclusion in, or claim to be excluded from, any such roll on grounds only of religion, race, caste, sex or any of them." The Article was adopted without any debate.

Article 289B was a repetition of draft Article 149 of the Draft Constitution. It specified thus: "Election to the House of the People and to the Legislative Assembly of every State shall be on the basis of adult suffrage; that is to say, every citizen, who is not less than twenty-one years of age on such date as may be fixed in this behalf by or under any law made by the appropriate Legislature and is not otherwise disqualified under this Constitution or any law made by the appropriate Legislature on the ground of non-residence, unsoundness of mind, crime or corrupt or illegal practice, shall be entitled to be registered as a voter at any such election."

Shri T. T. Krishnamachari observed, "This new Article is actually redundant. It may be that the Drafting Committee will subsequently have to take it away."

To this the President said, "When the time comes for rearranging the section, it may not be necessary to have this section in this form. But it has been moved."

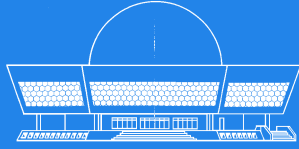
The motion was adopted and Article 289B was added to the Constitution. Eventually what the President said happened. In the Constitution of India, adopted on 26th January 1950, amended Article 289, 289A and 289B appeared as three separate Articles viz. Article 324, Article 325 and Article 326.

... concluded

### What Nehru said....

I am convinced that the methods and approach of science have revolutionized human life more than anything else in the long course of history, and have opened doors and avenues of further and even more radical change, leading up to the very portals of what has long been considered the unknown.

...From Chapter 1, The Discovery of India



## NEHRU PLANETARIUM

Tel: 91-22-24920510  
Mobile : 9892890510

## SKY SHOW : Biography of the Universe

12 noon (Hindi) 1:30 p.m. (Marathi)  
3:00 p.m. (English) 4:30 p.m. (Hindi)

(MONDAY CLOSED)

Tickets will be available online and at the Booking Counter.  
Visitors are expected to strictly follow Covid-19 norms.

Email: [managernpmumbai@gmail.com](mailto:managernpmumbai@gmail.com)

## Neptune

Neptune, the eighth planet in the solar system is named after the Roman god of the sea. It is also identified with the Greek god Poseidon. Other cultures too adopted similar names for the planet. In Chinese, Vietnamese, Japanese, and Korean, the planet's name is translated as the 'sea king star'. In India, it is better known as *Varun*, the Hindu god of the sea.

Neptune is the fourth-largest planet in the solar system. Its diameter is 49,244 kilometres. It completes one orbit around the Sun in 165 years and will complete its next orbit in 2029. The distance between the Earth and Neptune varies from 4.7 billion km. when both the planets are on opposite sides of the sun to 4.3 billion km. when the Earth is closest to Neptune. The Earth passes so close to Neptune every 367.49 days. Even though it is four times larger than Earth, the angular size of Neptune appears like a tennis ball kept at a distance of six kilometres.

Neptune's axis is tilted by  $29.5^\circ$  from the vertical to its orbital plane. This tilt is very similar to that of the Earth and just like Earth, seasonal changes take place on Neptune. However, seasonal changes on Neptune are much slower than those on Earth.

Neptune's mass is  $1.043 \times 10^{26}$  kg which is about seventeen times that of Earth but 1/19th that of Jupiter. Neptune is an ice-giant planet like

Uranus. The internal structure of Neptune is very similar to that of Uranus. Neptune has a very active and dynamic atmosphere. Its atmosphere mainly consists of hydrogen (79%), helium (18%) and methane (3%). This is a bit similar to that of Uranus but unlike Uranus, ammonia or water vapour were also detected in the atmosphere of Neptune. The presence of methane in the atmosphere of Neptune gives it a bluish-green colour.

The temperature in the upper atmosphere of Neptune is about  $-218^\circ$  C. This is similar to that on Uranus. This was a puzzling issue as Neptune is nearly 1.6 billion kilometres farther from the Sun than Uranus. At this distance, Neptune receives less than half as much energy from the Sun as Uranus. Hence the temperature in the upper atmosphere of Neptune should be cooler than that in Uranus' upper atmosphere. The reason for this is a likely contraction under its own gravity which generates energy.

Neptune has a rocky core roughly the size of the Earth. It is surrounded by a layer of liquid water and ammonia. This indicates that the temperature here is more than  $0^\circ$  C. Around this is a layer of liquid molecular hydrogen and helium with a small percentage of methane.

By the beginning of the nineteenth century, it had become clear to astronomers and mathematicians that they could not accurately compute the

ephemeris<sup>1</sup> of Uranus. The problem was so intriguing that some scientists even suspected that Newton's law of Gravity which was used to compute the orbits of planets might not be accurate at large distances from the Sun.

French astronomer Alexis Bouvard suggested that there might be a planet beyond Uranus whose gravitational force was influencing its motion and causing errors in the prediction of its position. Two mathematicians John Couch Adams in England and Urbain Le Verrier in France independently carried out complex mathematical computations to know the location of this planet. Based on the ephemeris given by Le Verrier, Johann Gottfried Galle observed the planet from his Berlin Observatory on 23 September 1864. This discovery also proved the validity of Newton's law.

Within a month of the discovery of Neptune, English astronomer William Lassell, discovered the first Neptunian moon on 10 October 1846. Named Triton, it is the only natural satellite in the solar system that revolves in the opposite direction of the rotation of all the planets and their satellites. Triton was possibly a captured satellite<sup>2</sup>, i.e. captured by the gravity of the planet, when it passed close to Neptune. Its diameter is 2700 kilometres and has a surface temperature of  $-235^\circ$  C. Later two more moons were discovered by astronomers using ground based telescopes.

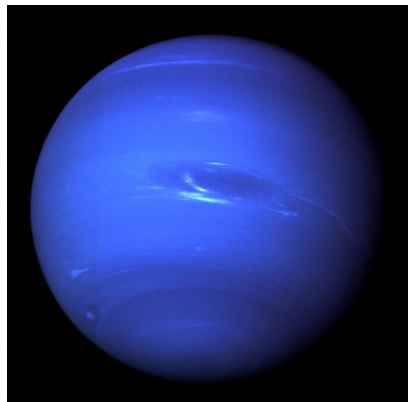
Neptune can be spotted in the sky with a good pair of binoculars or small telescopes. A study conducted in 2009 suggests that Galileo Galilei had observed this planet. We find that on the drawings made by him while observing Jupiter between 28 December 1612 and 27 January 1613, he had marked a star which was actually Neptune. Galileo, however, failed to recognize the unknown star as a planet, even though he noted that the position of the 'star' had changed between his early and later observations.

As it appears very small when seen from the Earth, not much could be learnt about Neptune until it was visited by Voyager 2, when it flew by the planet on 25 August 1989. It was the only space probe to visit Neptune.

One of the images sent by Voyager 2 was that of a large earth-sized dark storm. It was named the Great Dark Spot. Elliptical in shape with a dimension of 13,000 x 66,000 km., it had wind speeds around the edges of the storm which were estimated to be upto 2,100 km. per hour.

Later, when better and large ground based telescopes were built and Hubble Space Telescope started functioning in early 1990, we got more information about Neptune. In 1994 when Neptune was photographed using the Hubble Space Telescope, the Dark Spot had disappeared. But later, more such spots were observed. Astronomers are not sure about how these spots are formed or why they dissipate. This is still a debatable research subject. The James Webb Space Telescope (JWST) that was launched last year has sent some images of Neptune that we have not seen in the last thirty years.

Voyager 2 also discovered six moons of Neptune - Despina, Galatea, Larissa, Naiad, Proteus



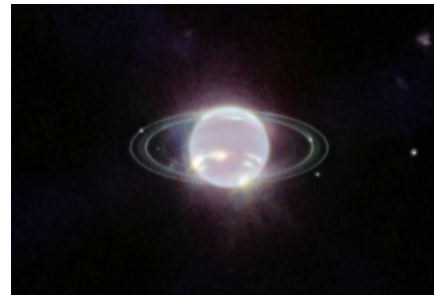
**Neptune**  
*Image Credit: Voyager 2*

and Thalassa. In 2001, five more moons were discovered using large ground-based telescopes which were confirmed in 2003. These are Halimede, Sao, Psamathe, Laomedeia, and Neso thus taking the total number to 12 moons. Later, Mark Robert Showalter, the Principal Investigator with NASA discovered two more moons which were named Hippocampus and Nereid.



**Triton captured by NASA Voyager 2 spacecraft**  
*Image Credit: NASA JPL*

In 1980, Neptune occulted<sup>3</sup> a star. This event allowed astronomers to estimate the diameter of the planet. But before the star was actually occulted by Neptune, the light from the star flickered, indicating the presence of a ring around Neptune. This ring's existence was confirmed nine years later when Voyager 2 sent images of Neptune. Dimensions of the ring particles may vary from a few micrometres to about ten metres. Planetary research carried out in 2002 and 2003 indicates that the rings are



**Neptune with its rings and several of its moons clearly visible**  
*Image Credit: James Webb Space Telescope's Near Infrared Camera.*

gradually disintegrating and some of the outer rings might vanish in outer space in a century. This is an unsolved problem of Neptunian rings and needs more research.

NASA plans to visit Neptune in the coming years through Trident which is a space mission that will be a flyby mission. It will visit Jupiter followed by Neptune with a focus on Triton. The second mission is Neptune Odyssey and is proposed as a flagship orbiter mission that will study Neptune and its moons and also study Triton in detail. It will send a probe into Neptune's atmosphere which is expected to be launched in 2033 and will reach Neptune in the year 2049.

.....  
*References*

1. An astronomical table giving the future positions of a planet, comet, or satellite.
2. Captured satellite is possibly an asteroid which is gravitationally captured by a planet.
3. Occultation is an astronomical phenomenon in which one celestial body comes directly between the observer and a distant celestial body.

*Note: Readers may like to read more about the discovery of Neptune in the September 2018 issue of the Nehru Centre Newsletter.*

# Culture Wing



## शब्द सुरांची भावयात्रा

An Evening of Marathi Ghazals  
by Shri Bhimrao Panchale &  
Dr. Bhagyashree Panchale



### Shri Bhimrao Panchale

Shri Bhimrao Panchale popularly known as Ghazal Nawaz, for his rendition of the music form in Marathi language, is also a poet, lyricist and composer.

After completing eight years of training, he performed Sugam Sangeet in different parts of Maharashtra and later began singing Urdu Ghazals. He also sang Marathi ghazals while conducting various mehfil in Maharashtra.

Shri Panchale's first concert in Marathi ghazal was in 1972. Most of the ghazals sung by him have been penned by lyricist Ilahi Jamadar.

Last year, Shri Bhimrao Panchale completed fifty years of presentation of Ghazal during which he travelled and performed in eighteen countries viz. U.S.A., Dubai, Switzerland, Kuwait and many more.

He has written a book on ghazals titled *Ghazaliyat* which is well received by ghazal lovers. Panchale has been awarded *Ekta Kala Gaurav Puraskar* in addition to other recognitions.

### Dr. Bhagyashree Panchale

Daughter of Shri Bhimrao Panchale, Dr. Bhagyashree's early lessons in music began at home under the guidance of her father. She has also been acquiring vocal skills in the great heritage of Kirana Gharana from her guru Smt. Archanatai Kanhere and has been a disciple of Smt. Apurvatai Gokhale who is her mentor in the Gwalior Gharana. She is also a well known Marathi ghazal singer. Dr. Bhagyashree has performed at various public functions and is the recipient of numerous state and national awards.

*Accompanying artistes:*

**Shri Girish Pathak on tabla**  
**Shri Sudhakar Ambuskar on harmonium**  
**Shri Sandeep Kapur on guitar**  
**Shri Abrar Ahmed on santoor**  
**Shri Iqbal Warsi on violin**

**Shri Ravindra Wadkar** will comper the programme.

**Saturday, 18th March 2023, 7.00 p.m.**

Entry: Entrance cards will be available on Monday, 13th March 2023 from 10.30 a.m. onwards until availability from the ticket counter of Nehru Centre Auditorium

**THE DESIGNERA**



The group will present young artists, who will showcase their recent works.

**Tuesday 28th February 2023 to  
Monday 6th March 2023  
(AC Gallery)**

**SUDHAKAR CHALKE**



Sudhakar will display compositions and landscapes in acrylic and water colours.

**Tuesday 28th February 2023 to  
Monday 6th March 2023  
(Circular Gallery)**

**MODEL ART EDUCATION SOCIETY**

The artworks of thirty college students will be showcased.

**Tuesday 7th March 2023 to  
Monday 13th March 2023  
(AC Gallery)**

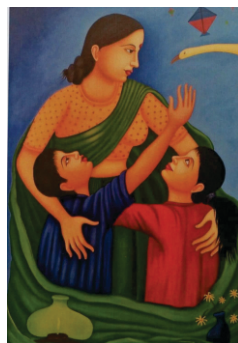
**VAISHALI KALE**



Vaishali will showcase paintings on Buddha and Ganesh.

**Tuesday 7th March 2023 to  
Monday 13th March 2023  
(Circular Gallery)**

**PRADEEP KANIK and others**



Pradeep Kanik

This group of ten artists will exhibit their art works and sculptures.

**Tuesday 14th March 2023 to  
Monday 20th March 2023  
(Both Galleries)**

**NITYANAND SAHU  
V. SATHEESAN . AJIT SAMAL  
BOBY ABRAHAM  
SANJAY KUMAR RAUL  
BIRA KISHOR PATRA**

Artworks on different subjects and in mixed media will be on show. There are two sculptors in the group whose works are in bronze and wood.

**Tuesday 21st March 2023 to  
Monday 27th March 2023  
(AC Gallery)**

**TEACHERS' SHOW**

Art teachers from Brihanmumbai Municipal Corporation schools will exhibit their artworks done during their annual art camp at Bhor and nearby places.

**Tuesday 21st March 2023 to  
Monday 27th March 2023  
(Circular Gallery)**

**ANITA HASURKAR  
SUTAPA DASGUPTA  
RATNAMALA . KALAIVANI  
DEBASHISHS NANDI  
P. C. PRASAD**



Anita Hasurkar

The artists are from Hyderabad. Each artist has different mediums and styles of their art works.

**Tuesday 28th March 2023 to  
Monday 3rd April 2023  
(AC Gallery)**

**GROUP SHOW**

Students from the Department of Drawing & Painting of S.N.D.T. Women's University will exhibit their art works in this exhibition.

**Tuesday 28th March 2023 to  
Monday 3rd April 2023  
(Circular Gallery)**

# RAMSAR WETLAND SITES IN INDIA

## 2. Andhra Pradesh

Kolleru Lake, one of the country's largest freshwater lakes that also houses a bird sanctuary, is situated between the two major river basins of the Godavari and the Krishna at about 55 km. east of Vijayawada and some 25 km. north west of the coastline. The bed of Kolleru lake is the site of cultivation of *yerra vari*, a native paddy variety. Cultivation around the lake was aided in the dry season by an irrigation system by which water from the lake was mechanically lifted and transported to the crop areas. This practice continued right up to the rule of the colonial powers.

Supplying the lake with water are four streams, fifteen major channels and fifteen drains. It has only one outlet, the Upputeru channel which is 62 km. long and empties into the Bay of Bengal. It is fed directly by two seasonal rivers - the Budameru and the Tammileru (East and West branches) besides thirty inflowing drains and a number of drains and channels which function as a natural flood balancing reservoir between the deltas of the two rivers. Kolleru Lake covers an area of about 901 sq.km. It provides habitat for about 193 species of resident and migratory birds, including declining numbers of the vulnerable Grey Pelican (*Pelecanus philippensis*) and a large number of flora and fauna including medicinal plants.

Migratory birds that inhabit Kolleru Lake include garganey teals, mallards, flamingos and grey pelicans who visit the lake from October to March every year. Though the Kolleru Lake is a very important wetland for both resident and migratory waterfowl, there has been a recent reduction of the birds visiting its waters. The grey pelicans formerly bred in large numbers but no longer do so. Kolleru Lake was formerly a wintering area for many wild ducks too like the pintails, whistling teals and others. The lake also provides a habitat for 61 species of fishes and 12 species of prawns. Commercially important species of catfish include *clarias batrachus*, *heteropneustes fossilis* and *wallago attu*.

The entire area consists of the lake, vast plains interspersed with pools of water with few tree species such as *borassus flabellifer*, *acacia nilotica* and *azadiracta indica* etc. The shrubs and herbs are typical vegetation of coastal areas which can be classified into aquatic, wetland and terrestrial vegetation. The lake is covered with littoral vegetation, predominantly of hydrophytes. The lake experiences brackish water conditions during summer months when the inflow of fresh water is low. The saline water reaches up to the middle regions of the lake, while in the northern parts freshwater conditions exist.

Kolletikota situated in the middle of the lake has got a temple of the local deity. Every year thousands of people visit the temple on a particular day during the annual *jatara* (festival of the deity). The place can be accessed only by boat and has religious importance.

Kolleru Lake in Andhra Pradesh was declared a Ramsar Wetland Site on 19th August 2002.



Kolleru Lake



Open billed storks



Vegetation at Kolleru Lake

**NEHRU CENTRE PUBLICATIONS**

**Books for Sale**

- Nehru Revisited
- India's Defence Preparedness
- Nehru and Indian Constitutionalism
- Internal Security in India
- Constitutionalism and Democracy in South Asia
- मुंबई: काल आणि आज
- Mumbai: Past and Present
- India and Central Asia
- Witness to History
- India-Russia Relations
- India-China Relations
- Remembering Einstein
- Challenges to Democracy in India
- Rule of Law in a Free Society
- Science in India
- Exploring The Universe

Colourful art catalogues for sale

- (1) GOPALRAO DEUSKAR (1995)
- (2) VINAYAKRAO KARMARKAR (1996)
- (3) MITTER BEDI (1997)
- (4) S. L. & G. S. HALDANKAR (1998)
- (5) BALAJI & HARISH TALIM (1999)
- (6) D. G. KULKARNI (DIZI) (2001)
- (7) NARAYAN L. SONAVADEKAR (2003)
- (8) NAGESH B. SABANNAVAR (2004)
- (9) SAMAKALEEN (2005)
- (10) VINAYAK S. MASOJI (2006)
- and many more...

ART FUSION catalogues

2007 / 2008 / 2009 / 2010 / 2011 / 2012 / 2013 / 2014

**Set of five assorted gift cards**  
Designed by differently abled children

**SANSKRUTI - CD ROM :**  
An aesthetics of Indian culture

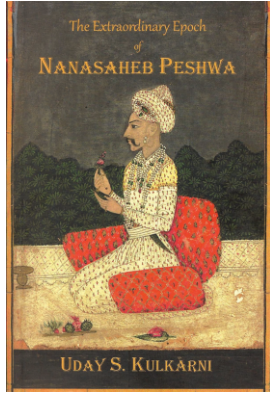
**DISCOVERY OF INDIA (VCD)**

Set of ten greeting cards  
Based on Discovery of India Exposition

Available at:  
Book Stall, Ground floor,  
Discovery of India Building,  
Nehru Centre, Worli, Mumbai - 400 018.



**BOOK DISCUSSION**



**The Extraordinary Epoch of Nanasaheb Peshwa**

*Written by*  
**Dr Uday S. Kulkarni**

*Speakers*  
**Dr Uday S. Kulkarni**  
**Dr Gaurav Gadgil**  
**Shri Amit Paranjape**




*Moderator*  
**Ms Soniya Khare**



The Peshwa trilogy is a series of three carefully researched and brilliantly written books on the Maratha confederacy. Replete with meticulously researched historical documents, maps, illustrations and references, *The Extraordinary Epoch of Nanasaheb Peshwa* written by Dr. Uday S. Kulkarni is the second in the three part series.

The book is published in hardcover, with over 40 colour pictures on art plates and 27 maps and illustrations. The 498 page book is copiously annotated with ample references and has a bibliography and a glossary along with an introduction to principal characters and important genealogies.

Date : **Wednesday, 29th March 2023**  
Time : **4.30 p.m.**  
Venue : **Hall of Harmony, Ground Floor, Discovery of India Building**

RSVP: [nehrucenlibrary@gmail.com](mailto:nehrucenlibrary@gmail.com)

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 <a href="http://nehrucen-koha.informindia.co.in">nehrucen-koha.informindia.co.in</a>  <a href="http://www.facebook.com/NehruCentreLibrary">www.facebook.com/NehruCentreLibrary</a>	<b>On all working days</b>
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