ನಮ್ಮ FORESIGHT

KAS/PSI/FDA/AAO/PDO

FORESIGHT KAS
(KAS/PSI/FDA/AAO/PC)

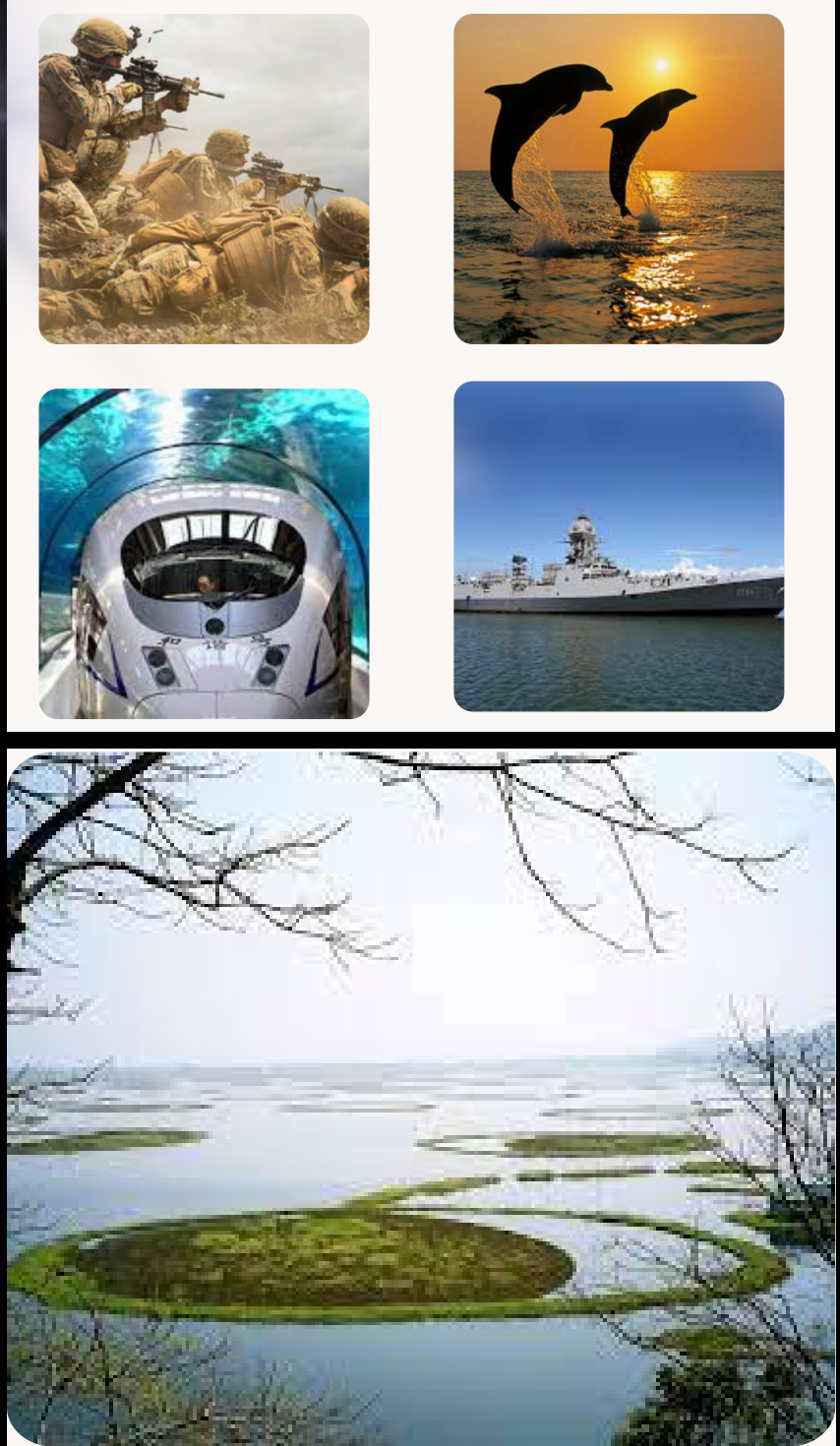## NEWS-INSHORTS

- Vimarsh 2023
- X-ray Polarimeter Satellite (XPoSat)
- The ADITI scheme
- Products that have received a new GI tag
- Government unveils 'Chakshu' initiative
- India's First Dolphin Research Centre-NDRC
- India's first underwater metro services, an engineering marvel in itself
- Tamil Nadu launches India's 'first' marine force to protect Gulf of Mannar & Palk Bay

FOCUS

- MCQ- Practice Questions -March 2024

KARNATAKA/INDIA/INTERNATIONAL-CURRENT AFFAIRS

- **Vimarsh 2023: 5G Hackathon for Law Enforcement Agencies**

- PANCHAMITRA - Rural development and panchayat Raj (RDPR) Departments Portal for grievances

- X-ray Polarimeter Satellite (XPoSat): India has become the second country in the world to launch an advanced astronomy observatory to study black holes and neutron stars, The satellite has estimated life span of about 5 years, The mission is propelled by the PSLV-C58 rocket in **Low Earth Orbit,** Entirely **built by two Bengaluru-based institutes**—ISRO's UR Rao Satellite Centre and Raman Research Institute

X-ray POlarimeter SATellite (XPOSAT)

First mission devoted to X-ray polarisation studies since X-ray polarization studies of celestial objects has been minimal.

Polarimeter **I**nstrument in **X**-rays (**POLIX**) payload being developed by Raman Research Institute (RRI).
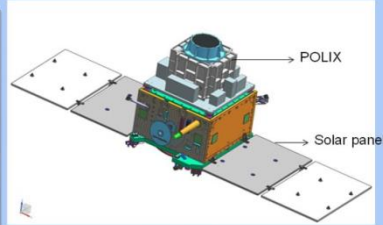
POLIX will study the degree and angle of polarization of bright X-ray sources (5-30 keV).

Modified IMS-2 bus

Pointing accuracy : 0.1degree

Slow rotation : 0.2 to 0.5 rpm

Low altitude orbit (~600 km) with a low inclination (< 30 degree)

→ POLIX

→ Solar panel

- United Nation's General Assembly (UNGA) declared 2023 as International Year of Millets on 05:03:2021

- The ADITI scheme worth Rs 750 crore for the period 2023-24 to 2025-26 falls under the iDEX (Innovations for Defence Excellence) framework of Department of Defence Production (DDP), Ministry of Defence. It aims to develop about 30 deep-tech critical and strategic technologies in the proposed timeframe

- (World Wildlife Day) March -03 Theme: Connecting People and Planet: Exploring Digital Innovation in Wildlife Conservation"

Cuttack Rupa Tarakasi, Banglar muslin get GI tag

Cuttack Rupa Tarakasi (silver filigree)

Banglar muslin

- **Products that have received a new GI tag**
Cuttack Rupa Tarakasi - Jewelery (Odisha)
The Bengalar Muslin - Handloom Craft (West Bengal)
Risa Textiles- (Tripura)

- **Darjeeling tea** was the first product to be GI tagged in India in 2004-05,**Tamil Nadu** has the highest number of GI tags in India.
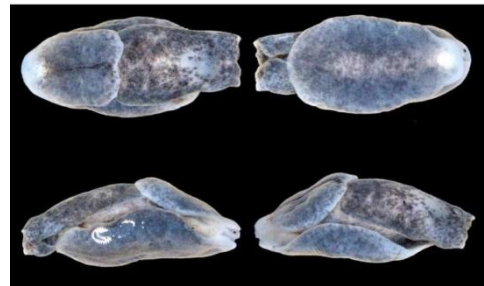
- **Bharat Ratna awardee in 2024**
arpoori Thakur, Lal Krishna Advani, P V Narasimha Rao, Chaudhary Charan Singh and Dr M S Swaminathan have been awarded the Bharat Ratna in 2024

Karpoori Thakur
(Former Bihar Chief Minister)

Lal Krishna Advani
(Former Deputy Prime Minister)

PV Narasimha Rao
(Former Prime Minister)

Chaudhary Charan Singh
(Former Prime Minister and CM – Uttar Pradesh)

MS Swaminathan
(Father of Green Revolution in India)

- **The Zoological Survey of India (ZSI) has found a new type of sea slug, naming it Melanochlamys**

- **Droupadi after India's President, Droupadi Murmu.(Discovered in Digha, West Bengal, and Udaipur, Odisha)**

- **Government unveils 'Chakshu' initiative to combat frauds through spam calls, messages**

- **T** he MethaneSAT satellite was launched aboard a SpaceX Falcon9 rocket from California- a satellite which will 'name and shame' methane emitters

- India's first indigenous Prototype Fast Breeder Reactor at Kalpakkam, Tamil Nadu

- India's First Dolphin Research Centre-NDRC

- India's inaugural **National Dolphin Research Centre (NDRC)** marks a significant milestone in the conservation efforts for the endangered **Gangetic dolphin (Platanista gangetica)**, Located strategically near the **Ganga river in Patna**, **Bihar**, the NDRC aims to be a hub for comprehensive research on various aspects of Gangetic dolphins, including behavior, survival skills, and causes of mortality.

- **Prime Minister Narendra Modi on Wednesday inaugurated India's first underwater metro services, an engineering marvel in itself. The Howrah Maidan-Esplanade section, a groundbreaking addition to the metropolitan transportation network, is acclaimed as India's first metro tunnel beneath a significant river**

- **National Action for Mechanized Sanitation Ecosystem (NAMASTE) and the government is looking to enable 100% mechanical desludging of septic tanks and sewers in all cities and towns.**

- **Tamil Nadu launches India's 'first' marine force to protect Gulf of Mannar & Palk Bay**

- **The border between Israel and Lebanon, known as the "Blue Line," was set by the United Nations in 2000 after Israel withdrew its military from southern Lebanon. It's not an official international border but a demarcation line- the term was in news**

- **DRDO has conducted the first flight test of Mission Divyastra with MIRV technology. India has for the first time publicly acknowledged to have successfully developed the MIRV technology that is possessed by major nuclear countries**

- **India has conducted first flight test of Made in India Agni-5 missile with MIRV technology, that stands for Multiple Independently Targetable Re-entry Vehicle. This allows a single missile to carry multiple warheads, including nuclear ones. In missiles equipped with MIRV, warheads are housed in the missile's bus. MIRV technology enables a single missile to destroy several targets simultaneously.**

- **world's first AI software engineer- Devin AI**

- **JT-60SA, the world's largest and most advanced nuclear fusion reactor started its official operations in Japan**

- **Election Commission of India has named Sheetal Devi, a Paralympic archer and recipient of the Arjuna Award, as its official national icon for persons with disabilities (PwD).**

- **Union Minister of Education launched the ULLAS: Nav Bharat Saksharta Karyakram mobile application. for Education sector**

- **the first India-specific artificial intelligence (AI) model to precisely determine the age of a foetus in a pregnant woman - Garbhini-GA2, developed by the researchers at the Indian Institute of Technology, Madras and Translational Health Science and Technology Institute (THSTI), Faridabad**

- **Sweden has officially become the 32nd member of NATO. North Atlantic Treaty Organization (NATO) started its largest military exercise in Europe, the Steadfast Defender 2024, recently.**

- **Odisha CM Patnaik unveiled India's first indoor athletics stadium and aquatic center at the Kalinga Stadium in Bhubaneshwar**

- **Operation Indravati: India Begins Evacuation of Its Nationals from Haiti**

  Other important operations in news

Operation kaveri	**Sudan**
operation Ganga	**Russia- Ukraine war**
operation Devishakthi	**Afganistan**
Operation Ajay	**Israel war**
Operation karuna	**Myanmar**
operation dost	**Turkey**

- **PM Modi Receives Bhutan's Highest Civilian Award 'Order Of The Druk Gyalpo'**

- **ISRO successfully conducts 'Pushpak' Reusable Landing Vehicle landing experiment(RLV LEX-02), This is the second in the series of experiment conducted at Aeronautical Test Range in Karnataka's Chitradurga**

- **IAU approves Statio Shiv Shakti as the name for Chandrayaan-3 Vikram lander landing site**

- Pushpak' is an innovative spacecraft developed by [Country's Space Agency] designed to carry payloads into space and return to Earth for reuse

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  ASSAM: MAJULI'S 16TH CENTURY 'MUKHA SHILPA' & 'MANUSCRIPT PAINTING' ARTFORMS EARN PRESTIGIOUS GI TAGS

- Central Horticultural Experiment Station (CHES) in Kodagu have developed a new variety called 'Arka Coorg Ravi', which will further im- prove coffee-based avocado cultivation in the district.

ISRO successfully conducts 'Pushpak' Reusable Landing Vehicle landing experiment

Context :
The Indian Space Research Organisation (ISRO) has successfully conducted the Pushpak Reusable Landing Vehicle (RLV) LEX 02 landing experiment at the Aeronautical Test Range in Chitradurga.

The RLV Pushpak is a winged technology demonstrator developed by the Indian Space Research Organisation (ISRO) to explore and validate technologies essential for achieving a fully reusable launch vehicle.

These technologies include hypersonic flight, autonomous landing, and powered cruise flight, among others.

Significance

Pushpak represents a significant step towards developing low-cost access to space.

By focusing on reusability, ISRO aims to reduce the costs of space missions by up to 80%, making space exploration more sustainable and accessible for research and commercial purposes.

- ISRO'S POEM-3 mission achieved Zero debris re-entry: ISRO successfully re-entered POEM-3 into Earth's atmosphere without debris in orbit, after PSLV-C58/XPoSat mission, The PSLV Orbital Experimental Module (POEM) is an initiative by ISRO aimed at repurposing spent stages of the Polar Satellite Launch Vehicle, specifically the 4th stage, PS4.

- Nepal Becomes First South Asian Country to Officially Recognise a same-sex marriage

- G20 TechSprint 2023: Organised to promote innovative solutions aimed at improving cross-border payments in G20 nations.

- India's first Artificial Intelligence based Film 'IRAH

- Rumy Alqahtani announced that she would be the first-ever participant from the country in the international competition(Saudi Arabia to participate in Miss Universe 1st time.)

- Mahabalipuram, Tamil Nadu, is now India's first green energy archaeological site.
  First ever Nuclear Energy Summit 2024 held in Belgium. The summit was Co-chaired by the PM of Belgium Alexander De Croo and the Director General of the International Atomic Energy Agency (IAEA) Rafael Mariano Grossi.

- International Atomic Energy Agency/Headquarters: Vienna, Austria

- World's first Om-shaped temple inaugurated in Rajasthan.

- The United Nations Commission on the Status of Women (CSW) unanimously appointed Saudi Arabia to chair its 69th session in 2025, Saudi Arabia to chair UN forum on women's rights and gender equality

- Global Biofuel Alliance (GBA): GBA was launched by India along with the leaders of Singapore, Bangladesh, Italy, USA, Brazil, Argentina, Mauritius and UAE. It aims to serve as a catalytic platform, fostering global collaboration for the advancement and widespread adoption of biofuels.

- Pm surya ghar Yojana: allocated 75021 crore for installing rooftop solar and providing free electricity upto 300 unit every month for one crore household.

- <u>International big cat alliance:</u> it is headquartered in India.it is an alliance of 97 range countries covering. (Not all UN countries). Aim to protect natural habitat of seven cat : tiger, lion, leopard, snow leopard puma jaguar and cheetah, out of seven big cat five are found in India i.e except jaguar, the highest no of leopard were reported in madhya Pradesh. - IUCN : vulnerable

- <u>Ecocide :</u> it is defined as "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts<u>, belgium has become the first country to recognize it is an national & international crime</u>

- <u>Rhodamine B -</u>A harmful coloring agent used in food - banned due to harmful side affects.by Karnataka

- <u>lakh pati didi scheme:</u> It is an initiative under the Ministry of Rural DevelopmentThe objective is to shift the focus from social and financial inclusion to entrepreneurial success. The programme is aimed at training 3 crore women in self-help groups (SHGs).

- <u>SAKHI application -developed by ISRO.</u> -To assist astronauts on Gaganyaan Space flight to perform a range of tasks.

- <u>Great Indian Bustard :</u> they are restricted only to Ballari in Karnataka , it will be declared as wildlife sanctuary

  IUCN STATUS : Critically Endangered

- Krishi Integrated Command and Control Center, It has been launched by Ministry of agriculture and farmer's welfare. t will showcase all types of data such as soil quality, rainfall, etc. The platform will also enable farmer beneficiaries to interact

MCQ Practice questions – March 2024

1. What is the purpose of the 'Chakshu' initiative unveiled by the government?
Answer: B) To combat frauds through spam calls and messages
Options:
A) To promote indigenous art forms
B) To combat frauds through spam calls and messages
C) To enhance agricultural productivity
D) To improve public transportation systems

2. Where was India's first indigenous Prototype Fast Breeder Reactor inaugurated?
Answer: B) Kalpakkam, Tamil Nadu
Options:
A) Mumbai, Maharashtra
B) Kalpakkam, Tamil Nadu
C) Jaipur, Rajasthan
D) Kolkata, West Bengal

3. Which city is home to India's inaugural National Dolphin Research Centre (NDRC)?
Answer: B) Patna, Bihar
Options:
A) Mumbai, Maharashtra
B) Patna, Bihar
C) Chennai, Tamil Nadu
D) Lucknow, Uttar Pradesh

4. Who inaugurated India's first underwater metro services?
Answer: B) Prime Minister Narendra Modi
Options:
A) President of India
B) Prime Minister Narendra Modi
C) Chief Minister of West Bengal
D) Chief Minister of Odisha

5. What does NAMASTE aim to achieve in Indian cities and towns?
Answer: B) Enable 100% mechanical desludging of septic tanks and sewers
Options:
A) Promote traditional arts and crafts
B) Enable 100% mechanical desludging of septic tanks and sewers
C) Improve healthcare infrastructure
D) Enhance educational facilities

6. Which state launched India's 'first' marine force to protect Gulf of Mannar & Palk Bay?
Answer: B) Tamil Nadu
Options:
A) Kerala

B) Tamil Nadu
C) Andhra Pradesh
D) Gujarat

7. What is the "Blue Line" that was set between Israel and Lebanon in 2000?
Answer: B) Demarcation line by the United Nations
Options:
A) Official international border
B) Demarcation line by the United Nations
C) River boundary agreement
D) Military defense zone

8. What technology did DRDO successfully develop with Mission Divyastra?
Answer: B) MIRV technology for missiles
Options:
A) Stealth technology for aircraft
B) MIRV technology for missiles
C) Satellite communication systems
D) Cybersecurity software for defense systems

9. What does MIRV stand for in the context of missile technology?
Answer: C) Multiple Independently Targetable Re-entry Vehicle
Options:
A) Multiple Integrated Re-entry Vehicle
B) Mobile Interception and Reconnaissance Vehicle
C) Multiple Independently Targetable Re-entry Vehicle
D) Modular Infrared Vision System

10. Who is recognized as the world's first AI software engineer?
Answer: A) Devin AI
Options:
A) Devin AI
B) Sophia Robot
C) Watson AI
D) Jarvis AI

11. Where did the world's largest nuclear fusion reactor, JT-60SA, start its official operations?
Answer: B) Japan
Options:
A) China
B) Japan
C) Russia
D) USA

12. Who was named as the official national icon for persons with disabilities by the Election Commission of India?
Answer: A) Sheetal Devi

Options:
A) Sheetal Devi
B) Deepa Malik
C) Mariyappan Thangavelu
D) Devendra Jhajharia

13. Which mobile application was launched by the Union Minister of Education for the education sector?
Answer: C) ULLAS
Options:
A) UDAAN
B) UJJWAL
C) ULLAS
D) UDAY

14. What is Garbhini-GA2 in the field of artificial intelligence?
Answer: A) Age prediction model for pregnant women
Options:
A) Age prediction model for pregnant women
B) Weather forecasting algorithm
C) Traffic management system
D) Healthcare diagnosis tool

15. Which country officially became the 32nd member of NATO?
Answer: A) Sweden
Options:
A) Sweden
B) Norway
C) Finland
D) Denmark

16. Where was India's first indoor athletics stadium and aquatic center unveiled?
Answer: D) Bhubaneshwar, Odisha
Options:
A) Mumbai, Maharashtra
B) Kolkata, West Bengal
C) Chennai, Tamil Nadu
D) Bhubaneshwar, Odisha

17. What is Operation Indravati related to?
Answer: C) Evacuation from Haiti
Options:
A) Space exploration mission
B) Humanitarian aid mission
C) Evacuation from Haiti
D) Military exercise in Europe

18. Which country awarded PM Modi with its highest civilian award 'Order Of The Druk Gyalpo'?
Answer: D) Bhutan
Options:
A) Nepal
B) Sri Lanka
C) Maldives
D) Bhutan

19. What did ISRO successfully conduct with the 'Pushpak' Reusable Landing Vehicle landing experiment (RLV LEX-02)?
Answer: C) Reusable spacecraft landing experiment
Options:
A) Deep space exploration mission
B) Lunar landing mission
C) Reusable spacecraft landing experiment
D) Satellite deployment mission

20. What is Statio Shiv Shakti associated with in the context of space exploration?
Answer: D) Chandrayaan-3 Vikram lander landing site
Options:
A) Space station on Mars
B) Lunar rover landing site
C) Venus orbiter mission
D) Chandrayaan-3 Vikram lander landing site

21. What is 'Pushpak' designed for in space missions?
Answer: C) Payload delivery into space and return to Earth
Options:
A) Satellite repair missions
B) Cargo delivery to space stations
C) Payload delivery into space and return to Earth
D) Interplanetary travel missions

22. Where was the new variety 'Arka Coorg Ravi' developed to improve coffee-based avocado cultivation?
Answer: B) Karnataka
Options:
A) Kerala
B) Karnataka
C) Tamil Nadu
D) Andhra Pradesh

23. What achievement did ISRO's POEM-3 mission accomplish regarding debris re-entry into Earth's atmosphere?
Answer: A) Zero debris re-entry
Options:

A) Zero debris re-entry
B) Controlled debris re-entry
C) Increased debris re-entry efficiency
D) Debris re-entry prevention system test

24. Which country became the first South Asian country to officially recognize a same-sex marriage?
Answer: D) Nepal
Options:
A) India
B) Pakistan
C) Bangladesh
D) Nepal

25. What was the objective of G20 TechSprint 2023?
Answer: B) Improve cross-border payments in G20 nations
Options:
A) Promote sustainable agriculture practices
B) Improve cross-border payments in G20 nations
C) Enhance renewable energy technologies
D) Develop advanced healthcare solutions

26. What is unique about India's first Artificial Intelligence-based Film 'IRAH'?
Answer: B) It uses AI for scriptwriting and direction
Options:
A) It features entirely animated characters
B) It uses AI for scriptwriting and direction
C) It employs AI for visual effects creation
D) It integrates AI into the storyline itself

27. Who announced Saudi Arabia's participation in Miss Universe for the first time ever?
Answer: A) Rumy Alqahtani
Options:
A) Rumy Alqahtani
B) Fatima Al-Mansour
C) Layla Al-Hassan
D) Sara Al-Farsi

28. Where is Mahabalipuram located, which has become India's first green energy archaeological site?
Answer: B) Tamil Nadu
Options:
A) Kerala
B) Tamil Nadu
C) Karnataka
D) Andhra Pradesh

29. Where was the First-ever Nuclear Energy Summit held in 2024?
Answer: A) Belgium
Options:
A) Belgium
B) France
C) Germany
D) Switzerland

30. Where is the headquarters of the International Atomic Energy Agency located?
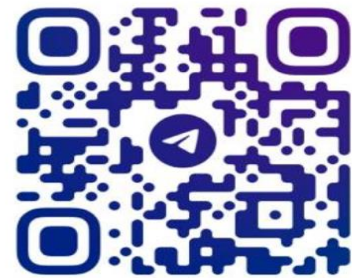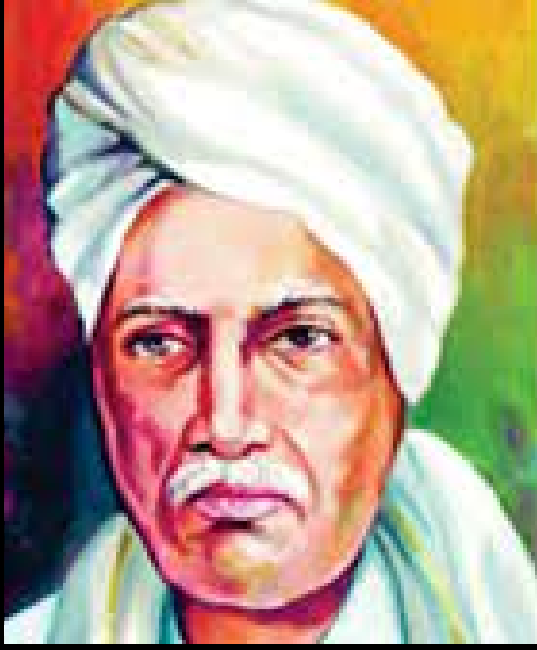Answer: B) Vienna, Austria
Options:
A) Geneva, Switzerland
B) Vienna, Austria
C) New York, USA
D) Paris, France

"It was Channabasappa who initiated the great task of preserving Kannada language, education, literature and culture in the late 19th century, when Marathi was dominant and English was introduced in Mumbai Karnataka.

"Kannada clan, as a bright fan of the land, as a renowned educationist, as a mathematician, as a great orator, as the first author to introduce Shakespeare to Kannada, as the first principal of Karnataka's first and foremost educational training institute, as the founder of the centenary celebrated Kannada Ekameva academic monthly _"Jeevana Shiksha"_, an efficient Deputy Educational Inspector.

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