



# Daily PIB Summary

---

03 July, 2026

# Welcome to PadhAI

## Your Partner in Smart UPSC Preparation

You're holding a resource designed to cut through the noise and bring you *only what truly matters* for the exam. At PadhAI, we believe preparation should be clear, focused, and time-efficient — never overwhelming.

At PadhAI, we build everything around one philosophy:

*"Learn only what matters.*

*Learn it the right way.*

*Learn it at the right time."*

With a rapidly growing community of **2lakh+ aspirants**, PadhAI has become a trusted space for disciplined learning and daily practice.

We bring you:

- Concise Monthly Magazines
- Daily PIB Summaries @ 9 PM
- Daily MCQs + Mains Practice
- High-yield, exam-ready content
- APP features - duel competition, fast mains answer review, daily news article summary, PYQs, MCQs PRACTICE, AI tutor (based on highly yield content From UPSC topper insight, and various trusted websites). Many more feature which will improve your preparation and save your time automatically.

---

Join our Telegram community and download the PadhAI App to experience structured guidance, supportive peers, and consistent motivation — everything a serious aspirant needs

*Welcome to a smarter way of preparing.*

*Welcome to PadhAI.*



[Click here](#) to join to telegram channel

Scan the QR code or just click on it  
to download the app

## 1. OLDEST ACCURATELY DATED BANYAN FOUND IN MUNGER, BIHAR



- Researchers developed a scientific methodology using **Accelerator Mass Spectrometry (AMS) radiocarbon dating** to determine the tree's age.
- The study estimated the Munger banyan to be approximately **700 years old**, making it the oldest accurately dated banyan tree.
- The research overcomes the limitation of conventional dendrochronology, as banyan trees generally lack distinct annual growth rings.
- The methodology improves the scientific documentation of heritage trees and strengthens biodiversity conservation efforts.

- The findings also redefine the historical chronology of the region by showing that the tree predates nearby colonial-era structures.
- The technique can be applied to other tropical tree species lacking annual growth rings.
- The study contributes to conservation biology, palaeobotany, and climate research.
- It strengthens India's role in advancing scientific methods for preserving natural heritage.

### BACKGROUND / CONTEXT

#### Radiocarbon Dating

- Determines the age of organic materials by measuring the decay of **Carbon-14 ( $^{14}\text{C}$ )**.
- Particularly useful where annual growth rings are absent.

#### Accelerator Mass Spectrometry (AMS)

- Highly precise technique for measuring radiocarbon content.
- Requires very small sample quantities.
- Widely used in archaeology, geology, and palaeosciences.

#### Why Banyan Trees are Difficult to Date

- Banyan trees produce multiple aerial roots and secondary trunks.
- They generally lack distinct annual growth rings.
- Conventional **dendrochronology** is therefore ineffective.

#### Ecological Importance of Banyan Trees

- Scientific name: **Ficus benghalensis**.
- National Tree of India.
- Provides habitat for birds, insects, mammals, and epiphytes.
- Acts as a keystone species in many ecosystems due to year-round fruit production.

### KEY HIGHLIGHTS

- **Discovery:** Munger banyan identified as the oldest accurately dated banyan tree.





- **Age:** Approximately **700 years**.
- **Methodology:** AMS-based radiocarbon dating of alpha-cellulose extracted from wood samples.
- **Institution:** Birbal Sahni Institute of Palaeosciences (BSIP).
- **Scientific Significance:** Provides a reliable protocol for dating tropical heritage trees.
- **Ecological Importance:** Supports biodiversity conservation and heritage tree protection.
- **Challenges:** Lack of annual growth rings in tropical trees and limited scientific age verification.
- **Way Forward:** Expand scientific dating of heritage trees, strengthen conservation policies, and integrate heritage tree documentation into biodiversity management.

### PRELIMS BOOSTER BOX

- **Scientific Name of Banyan:** *Ficus benghalensis*.
- **National Tree of India:** Banyan.
- **Carbon-14 (<sup>14</sup>C):** Radioactive isotope used in radiocarbon dating.
- **AMS:** Accelerator Mass Spectrometry.
- **Alpha-cellulose:** Stable component of plant cell walls commonly used in radiocarbon dating.
- **Dendrochronology:** Dating trees using annual growth rings.
- **Keystone Species:** Species having a disproportionately large effect on ecosystem stability.
- **BSIP:** Birbal Sahni Institute of Palaeosciences, Lucknow.
- **Research Published In:** *Quaternary Research*.
- **Heritage Trees:** Trees possessing ecological, historical, cultural, or scientific significance.

### PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Radiocarbon dating estimates the age of organic material by measuring the decay of Carbon-14.
2. Banyan trees are generally difficult to date using dendrochronology because they lack distinct annual growth rings.
3. *Ficus benghalensis* is the scientific name of the Peepal tree.

Which of the statements given above is/are correct?

- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

Answer: (b)

## 2. MOU BETWEEN MASSEY UNIVERSITY, NEW ZEALAND AND NIFTEM-K TO STRENGTHEN FOOD TECHNOLOGY COOPERATION



- The MoU establishes a framework for academic and research collaboration between NIFTEM-K and Massey University.
- It promotes joint research, faculty and student exchanges, training programmes, and knowledge sharing in food science and technology.
- The partnership is expected to strengthen innovation in food processing, food safety,



value addition, and sustainable agri-food systems.

- International academic collaboration will enhance skill development and research capabilities in emerging areas of food technology.
- The initiative supports India's objective of developing a globally competitive food processing ecosystem.
- It also contributes to human resource development and technology transfer in the agri-food sector.
- The collaboration aligns with the goals of internationalization of higher education under the National Education Policy (NEP) 2020.
- The partnership is expected to improve innovation, entrepreneurship, and global best practices in food technology education.

## BACKGROUND / CONTEXT

### National Institute of Food Technology Entrepreneurship and Management (NIFTEM-K)

- Located at **Kundli, Haryana**.
- Functions under the **Ministry of Food Processing Industries (MoFPI)**.
- Declared an **Institution of National Importance** under the **NIFTEM Act, 2021**.
- Focuses on education, research, entrepreneurship, and skill development in food technology.

### Massey University

- Public university in **New Zealand**.
- Known for teaching and research in agriculture, food technology, veterinary sciences, and life sciences.

### Food Processing Sector

- I. Acts as a bridge between agriculture and industry.
- II. Promotes:
  - A. Value addition.

- B. Food safety.
- C. Employment generation.
- D. Export competitiveness.
- E. Reduction of post-harvest losses.

### National Education Policy (NEP) 2020

- Encourages international collaborations.
- Promotes research, innovation, multidisciplinary education, and global academic partnerships.

### KEY HIGHLIGHTS

- **Agreement:** MoU between Massey University and NIFTEM-K.
- **Objective:** Strengthen cooperation in food technology, research, and innovation.
- **Focus Areas:** Joint research, academic exchange, training, and entrepreneurship.
- **Institutional Significance:** Enhances international collaboration in higher education.
- **Economic Impact:** Supports growth of India's food processing sector and value-added agriculture.
- **Policy Alignment:** Complements NEP 2020 and initiatives for global academic engagement.
- **Challenges:** Technology transfer, funding, research commercialization, and industry-academia linkage.
- **Way Forward:** Expand collaborative research, strengthen innovation ecosystems, promote industry partnerships, and enhance global mobility of students and faculty.

### PRELIMS BOOSTER BOX

- **NIFTEM-K:** National Institute of Food Technology Entrepreneurship and Management, Kundli.
- **Location:** Kundli, Haryana.
- **Administrative Ministry:** Ministry of Food Processing Industries (MoFPI).
- **NIFTEM Act: 2021.**
- **Status:** Institution of National Importance.



- **NEP 2020:** Promotes internationalization of higher education and multidisciplinary research.
- **Food Processing:** Conversion of agricultural produce into value-added food products.
- **Value Addition:** Enhancing the economic value of agricultural produce through processing.
- **Post-Harvest Losses:** Quantitative and qualitative losses occurring after harvest and before consumption.
- **Technology Transfer:** Process of transferring scientific knowledge and innovations for commercial or practical application.

### PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. NIFTEM-K functions under the Ministry of Food Processing Industries.
2. NIFTEM-K was declared an Institution of National Importance under the NIFTEM Act, 2021.
3. The National Education Policy (NEP) 2020 encourages international academic collaborations and research partnerships.

Which of the statements given above is/are correct?

- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

**Answer: (d)**

### 3. 'PASHUJANYA YUDH ABHYAS (PYA)' STRENGTHENS INDIA'S PREPAREDNESS FOR ANIMAL HEALTH EMERGENCIES AND ZOOONOTIC DISEASE OUTBREAKS



- Pashujanya Yudh Abhyas (PYA) is a simulation exercise designed to assess and strengthen India's preparedness for animal disease emergencies.
- The exercise enhances coordination among veterinary services, disaster management agencies, public health institutions, and other stakeholders.
- It focuses on improving surveillance, early warning systems, rapid response, and containment of zoonotic diseases.
- The initiative supports the One Health approach by integrating animal, human, and environmental health.
- Strengthened preparedness helps minimize economic losses in the livestock sector and protects public health.
- The exercise contributes to improving national biosecurity and disease surveillance infrastructure.
- It also strengthens India's compliance with international standards for animal health management.

- The initiative supports sustainable livestock development and national health security.

## BACKGROUND / CONTEXT

### Pashujanya Yudh Abhyas (PYA)

- I. National simulation exercise for preparedness against:
  - A. Animal disease outbreaks.
  - B. Zoonotic disease emergencies.
  - C. Livestock health crises.
- II. Tests emergency response mechanisms and inter-agency coordination.

### One Health Approach

- I. Recognizes the interconnection between:
  - A. Human health.
  - B. Animal health.
  - C. Environmental health.
- II. Promotes multidisciplinary collaboration for disease prevention and control.

### Zoonotic Diseases

- I. Diseases transmitted naturally between animals and humans.
- II. Examples:
  - A. Rabies.
  - B. Avian Influenza.
  - C. Brucellosis.
  - D. Anthrax.
  - E. Nipah Virus Disease.

### Importance of Livestock Health

- Ensures food security.
- Protects rural livelihoods.
- Prevents economic losses.
- Supports safe trade in livestock and animal products.

### KEY HIGHLIGHTS

- **Exercise:** Pashujanya Yudh Abhyas (PYA).
- **Objective:** Strengthen preparedness for animal health emergencies and zoonotic disease outbreaks.

- **Approach:** One Health framework integrating human, animal, and environmental health.
- **Focus Areas:** Surveillance, early detection, rapid response, and inter-agency coordination.
- **Strategic Importance:** Enhances national biosecurity and public health preparedness.
- **Economic Significance:** Protects livestock productivity and rural livelihoods.
- **Challenges:** Cross-border disease transmission, surveillance gaps, limited veterinary infrastructure, and antimicrobial resistance.
- **Way Forward:** Strengthen disease surveillance networks, expand One Health implementation, improve laboratory capacity, enhance veterinary services, and promote community awareness.

### PRELIMS BOOSTER BOX

- **One Health:** Integrated approach linking human, animal, and environmental health.
- **Zoonotic Disease:** Disease naturally transmitted between animals and humans.
- **Rabies:** Viral zoonotic disease transmitted mainly through infected animal bites.
- **Avian Influenza:** Viral disease affecting birds with potential human transmission.
- **Brucellosis:** Bacterial zoonotic disease affecting livestock and humans.
- **Anthrax:** Bacterial disease caused by *Bacillus anthracis*.
- **Nipah Virus:** Zoonotic virus with fruit bats as natural reservoir hosts.
- **Biosecurity:** Measures to prevent introduction and spread of infectious diseases.
- **Disease Surveillance:** Continuous collection, analysis, and dissemination of health data.
- **Livestock Sector:** Important contributor to agricultural income, nutrition, and rural employment.



## PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. The One Health approach integrates human, animal, and environmental health.
2. Rabies and Brucellosis are examples of zoonotic diseases.
3. Biosecurity measures aim to prevent the introduction and spread of infectious diseases.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

Answer: (d)

## 4. INDIA-FRANCE ECONOMIC & FINANCIAL DIALOGUE (EFD) HELD IN AIX-EN-PROVENCE



- The India-France Economic & Financial Dialogue serves as a key institutional mechanism for advancing bilateral economic cooperation.
- Discussions covered investment, financial sector collaboration, clean energy, infrastructure financing, digital economy, and industrial partnerships.
- Both countries emphasized strengthening resilient supply chains and promoting sustainable economic growth.

- The dialogue reinforces cooperation in emerging technologies, innovation, and green finance.
- Enhanced financial and economic collaboration is expected to facilitate greater bilateral trade and investment flows.
- The engagement supports India's objectives of attracting foreign investment and accelerating economic transformation.
- It also strengthens India-France cooperation in the Indo-Pacific and global economic governance.
- The dialogue reflects the growing strategic and economic convergence between the two countries.

## BACKGROUND / CONTEXT

### India-France Economic & Financial Dialogue (EFD)

- I. Institutional platform for strengthening bilateral economic and financial cooperation.
- II. Facilitates discussions on:
  - A. Trade and investment.
  - B. Financial markets.
  - C. Infrastructure financing.
  - D. Industrial cooperation.
  - E. Green finance.
  - F. Digital economy.

### India-France Strategic Partnership

- I. Established in **1998**.
- II. Covers cooperation in:
  - A. Defence.
  - B. Space.
  - C. Civil nuclear energy.
  - D. Climate action.
  - E. Maritime security.
  - F. Education and technology.
  - G. Economic cooperation.

### Areas of Economic Cooperation

- Infrastructure development.





- Renewable energy.
- Green hydrogen.
- Digital technologies.
- Artificial Intelligence.
- Innovation and startups.
- Supply chain resilience.

### Importance of France

- Major strategic partner of India in Europe.
- Significant investor in India.
- Key collaborator in defence, aerospace, clean energy, and advanced technology.

### KEY HIGHLIGHTS

- **Dialogue:** India–France Economic & Financial Dialogue (EFD).
- **Co-Chairs:** Finance Minister Nirmala Sitharaman and French Minister Roland Lescure.
- **Venue:** Aix-en-Provence, France.
- **Focus Areas:** Trade, investment, finance, clean energy, digital economy, and industrial cooperation.
- **Strategic Significance:** Strengthens the India–France Strategic Partnership.
- **Economic Impact:** Promotes investment, technology collaboration, and sustainable growth.
- **Challenges:** Global economic uncertainty, supply chain disruptions, and evolving geopolitical dynamics.
- **Way Forward:** Deepen financial cooperation, expand green investments, strengthen innovation partnerships, and enhance bilateral trade and industrial collaboration.

### PRELIMS BOOSTER BOX

- **India–France Strategic Partnership:** Established in **1998**.
- **France:** Founding member of the **European Union (EU)** and **NATO**.
- **International Solar Alliance (ISA):** Jointly launched by India and France in **2015**.

- **Headquarters of ISA:** Gurugram.
- **Major Areas of India–France Cooperation:** Defence, civil nuclear energy, space, climate, Indo-Pacific, and trade.
- **Green Finance:** Financing investments that generate environmental benefits.
- **Supply Chain Resilience:** Ability to maintain uninterrupted supply despite disruptions.
- **Indo-Pacific:** Strategic region extending from the Indian Ocean to the Pacific Ocean.
- **Foreign Direct Investment (FDI):** Investment made by an entity in one country into business interests in another country.
- **Economic Diplomacy:** Use of economic tools and partnerships to advance foreign policy objectives.

### PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. The India–France Strategic Partnership was established in 1998.
2. The International Solar Alliance (ISA) was jointly launched by India and France.
3. Green finance refers to financing investments that generate environmental benefits.

Which of the statements given above is/are correct?

- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3

**Answer: (d)**

## 5. DPIIT ENGAGES WITH STARTUPS UNDER FICCI MERCEDES-BENZ BHARAT INNOVATION & BUSINESS IDEAS CHALLENGE PROGRAMME



- The programme facilitates interaction between startups, industry, and government to foster innovation-led economic growth.
- DPIIT highlighted the importance of strengthening India's startup ecosystem through policy support, mentorship, and market access.
- Industry participation enables startups to validate technologies, access funding opportunities, and scale innovative solutions.
- The initiative encourages collaboration in emerging sectors such as mobility, sustainability, manufacturing, and digital technologies.
- Public-private partnerships play a crucial role in accelerating commercialization of innovations.
- The programme aligns with the objectives of **Startup India** and **Make in India** by promoting entrepreneurship and indigenous innovation.
- It contributes to employment generation, technology development, and economic competitiveness.
- The initiative reinforces India's position as one of the world's leading startup ecosystems.

## BACKGROUND / CONTEXT

### Department for Promotion of Industry and Internal Trade (DPIIT)

- I. Functions under the **Ministry of Commerce and Industry**.
- II. Responsible for:
  - A. Promotion of industrial development.
  - B. Startup recognition under **Startup India**.
  - C. Ease of Doing Business reforms.
  - D. Intellectual Property Rights (IPR) promotion.
  - E. Investment facilitation.

### Startup India Initiative

- I. Launched on **16 January 2016**.
- II. Objective:
  - A. Promote entrepreneurship.
  - B. Encourage innovation.
  - C. Support startup growth through funding, tax incentives, incubation, and regulatory reforms.

### Role of Industry Partnerships

- Provide mentorship.
- Facilitate technology commercialization.
- Improve market access.
- Encourage research and innovation.
- Strengthen startup-industry collaboration.

### Public-Private Partnership in Innovation

- Accelerates technology adoption.
- Enhances investment opportunities.
- Supports product development and scaling.
- Promotes globally competitive innovation ecosystems.

### KEY HIGHLIGHTS

- **Programme:** FICCI Mercedes-Benz Bharat Innovation & Business Ideas Challenge.



- **Lead Government Agency:** Department for Promotion of Industry and Internal Trade (DPIIT).
- **Objective:** Promote innovation, entrepreneurship, and industry-startup collaboration.
- **Focus Areas:** Emerging technologies, mobility, sustainability, and manufacturing innovation.
- **Economic Significance:** Encourages employment generation, investment, and technology commercialization.
- **Governance Impact:** Strengthens the Startup India ecosystem through government-industry engagement.
- **Challenges:** Access to finance, market linkage, technology scaling, and commercialization.
- **Way Forward:** Expand incubation support, strengthen industry partnerships, improve access to venture capital, and promote global market integration for startups.

## PRELIMS BOOSTER BOX

- **DPIIT:** Department for Promotion of Industry and Internal Trade.
- **Administrative Ministry:** Ministry of Commerce and Industry.
- **Startup India:** Launched on **16 January 2016**.
- **Recognized Startup:** Startup fulfilling eligibility criteria prescribed by DPIIT.
- **Make in India:** Initiative launched in **2014** to promote manufacturing and investment.
- **Incubator:** Organization supporting startups through mentoring, infrastructure, and networking.
- **Accelerator:** Programme providing intensive mentoring, funding, and business development support.
- **Intellectual Property Rights (IPR):** Legal rights protecting inventions, designs, trademarks, and creative works.
- **Technology Commercialization:** Process of converting research and innovation into marketable products and services.

- **Ease of Doing Business:** Measures aimed at simplifying regulations and improving the business environment.

## PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. DPIIT functions under the Ministry of Commerce and Industry.
2. Startup India was launched in 2016 to promote entrepreneurship and innovation.
3. Incubators primarily provide startups with mentoring, infrastructure, and networking support.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**Answer: (d)**