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## **DAILY CURRENT AFFAIRS 03-09-2024**

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### **GS-3**

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## **Are lie-detector tests legally valid?**

**Syllabus: GS-2; Judiciary, GS-4; Ethical Concerns**

### **Context**

- Recently, The Central Bureau of Investigation (CBI) conducted a second round of polygraph tests on seven people, in connection with the rape and murder of a resident doctor at the R.G. Kar Medical College and Hospital in Kolkata.

### **What is a Lie-detector test?**

- Lie-detector tests, also known as **polygraph tests**, are devices used to measure physiological responses such as heart rate, blood pressure, respiration, and skin conductivity while a person answers questions.
- The theory behind polygraphs is that deceptive answers will produce physiological responses that can be detected by the machine.

### **Legal Validity of Lie-Detector Tests**

#### **Admissibility in Court**

- **India**
  - In India, the legal validity of lie-detector tests is limited. The Supreme Court of India, in the case of **Selvi & Ors vs State of Karnataka (2010)**, ruled that no individual should be forcibly subjected to lie-detector tests, brain mapping, or narco-analysis.
  - Such tests can only be conducted with the consent of the individual, and even then, the results are not automatically admissible as evidence in court.
  - The rationale is that the results of these tests are not foolproof and can be affected by various factors such as the subject's psychological state.
- **United States**
  - In the U.S., the admissibility of polygraph tests varies by jurisdiction.
  - **The Federal Polygraph Protection Act of 1988** prohibits employers from using lie detectors in most employment situations.
  - In court, their admissibility is often determined on a case-by-case basis, and they are generally not accepted as reliable evidence unless both parties agree to their use.
- **Other Countries**
  - The admissibility of polygraph results in other countries varies widely, with many legal systems either not recognizing them at all or admitting them under very strict conditions.

## Reliability Concerns

- **Accuracy:** Critics argue that polygraph tests are not 100% accurate and can produce false positives or negatives. For instance, a person might show signs of stress or anxiety that could be misinterpreted as deception, while a calm and composed liar might not exhibit detectable physiological changes.
- **Influence of External Factors:** Factors such as the subject's emotional state, medication, and even the skill of the examiner can affect the test results.

## Ethical and Human Rights Issues

- **Consent:** The use of polygraph tests raises ethical concerns, particularly regarding the need for informed consent. Forcing someone to undergo such a test can be seen as a violation of their human rights.
- **Privacy:** There are also concerns about privacy, as the test involves probing into the personal thoughts and emotions of the individual.

## Conclusion

- Lie-detector tests are controversial and their legal validity is limited.
- In many jurisdictions, they are not considered reliable enough to be used as sole evidence in legal proceedings.
- The results of polygraph tests are generally viewed with caution, and their use is often subject to strict legal and ethical guidelines.

## eShram portal

### Syllabus: GS-2; Governance, GS-3; Labor market Reformers

#### Context

- The eShram portal, a national database for informal sector workers, has surpassed **30 crore registrations** within three years, the labour ministry announced.

#### About

- *The eShram portal is a **national database** developed by the **Ministry of Labour and Employment, Government of India**, to register unorganized sector workers across the country.*
- *It was launched on August 26, 2021, with the aim of creating a comprehensive database of unorganized workers to ensure their access to various social security and welfare schemes.*

## Objectives

- **Comprehensive Database:** *To create a central repository of unorganized workers, which includes migrant workers, gig workers, platform workers, street vendors, domestic workers, agricultural laborers, construction workers, etc.*
- **Social Security:** *To ensure that workers in the unorganized sector have access to social security benefits such as pensions, insurance, and healthcare.*
- **Welfare Schemes:** *To facilitate the delivery of various welfare schemes and initiatives by the government.*
- **Employment Tracking:** *To track the movement of unorganized workers and provide them with job opportunities and skill development programs.*

## Key Features

- **Universal Account Number (UAN):** *Every registered worker is provided with a unique 12-digit Universal Account Number (UAN), which is valid across the country.*
- **Digital Platform:** *The portal is designed to be user-friendly and accessible via mobile devices, ensuring that even workers in remote areas can register themselves.*
- **Self-Registration and Assisted Registration:** *Workers can self-register on the portal using their Aadhaar number, or they can get assistance from Common Service Centers (CSCs) and State Seva Kendras.*
- **Free of Cost:** *The registration on the eShram portal is free of charge for all unorganized sector workers.*
- **Direct Benefit Transfer (DBT):** *The eShram database enables the government to directly transfer benefits to the bank accounts of registered workers.*

## Eligibility Criteria

- **Unorganized Workers:** *The portal is open to all workers in the unorganized sector aged between 16 and 59 years.*
- **Aadhaar Linked:** *Registration requires an Aadhaar number and a mobile number linked with Aadhaar.*
- **Exclusion:** *Workers who are members of EPFO, ESIC, or are income taxpayers are not eligible.*

## Benefits of eShram Portal

- **Accidental Insurance:** Registered workers are eligible for a ₹2 lakh insurance cover under the *Pradhan Mantri Suraksha Bima Yojana (PMSBY)* for accidental death and disability.
- **Government Schemes:** Workers will be automatically linked to various social security schemes like PM-JAY, PM-KISAN, etc.
- **Portability:** The benefits of the eShram card are portable across the country, ensuring that migrant workers can access social security benefits anywhere in India.
- **Future Benefits:** The database will serve as a foundation for future government schemes for unorganized workers.

## Challenges and Criticisms

- **Awareness and Accessibility:** Ensuring that workers in remote areas and those with low literacy levels are aware of and can access the portal remains a challenge.
- **Data Privacy:** Concerns have been raised about the privacy and security of the personal data collected on the portal.
- **Implementation:** The effectiveness of the portal depends on the seamless integration with state-level databases and the actual delivery of benefits.

## Rules 170 of drugs act

**Syllabus: GS-2: Health sector – Regulations.**

### Context:

- *Justices Hima Kohli and Sandeep Mehta pulled up the AYUSH Ministry for its notification dated July 1, asking state licensing authorities not to take action under Rule 170 of the Drugs and Cosmetics Act.*

### Rule 170 of the Drugs and Cosmetics Act

- **Introduction:**
  - *Rule 170 was introduced in 2018 to govern the manufacture, storage, and sale of AYUSH medicines, specifically targeting inappropriate advertisements.*

- *The rule was a response to the issues highlighted by a parliamentary standing committee concerning misleading claims in the AYUSH sector.*

➤ **Provisions:**

- *Prohibits AYUSH drug manufacturers from advertising products without prior approval and allotment of a unique identification number from the state licensing authority.*
- *Manufacturers must submit:*
  - *Textual references and rationale for the medicine from authoritative books.*
  - *Indication for use, evidence of safety, effectiveness, and quality.*
- **Rejection Criteria:**
  - *Lack of contact details of the manufacturer.*
  - *Obscene or vulgar content.*
  - *Products aimed at enhancing male or female sexual organs.*
  - *Use of celebrity testimonials, government references, or misleading claims.*

## Challenges in Regulating AYUSH Drugs

➤ **Licensing:**

- *AYUSH drug manufacturers, like those of allopathic medicines, require a license from the drug controller.*
- *Unlike allopathic medicines, AYUSH drugs do not require Phase I, II, or III clinical trials for approval.*

○ **Approval Basis:**

- *Most AYUSH drugs are approved based on rationale from authoritative texts.*
- *Safety trials are required only for formulations containing around 60 specific ingredients (e.g., snake venom, heavy metals like arsenic and mercury).*
- *Proof of effectiveness is necessary for drugs containing specific ingredients or traditional drugs intended for new indications.*

## AYUSH Ministry's Directive to Licensing Authorities

➤ **Directive:**

- *On July 1, the AYUSH Ministry directed state licensing authorities to ignore Rule 170 due to ongoing amendments in the Drugs and Magic Remedies Act.*

- **Rationale:**

- *The Ayurvedic, Siddha, and Unani Drugs Technical Advisory Board (ASUDTAB) recommended omitting Rule 170 during a May 2023 meeting.*
- *Amendments to the Drugs and Magic Remedies Act are under consideration by the health and AYUSH ministries.*

## What is Unified Lending Interface by the RBI?

**Syllabus: GS-3; Economy- Financial Inclusion**

### **Context**

- *The Reserve Bank of India (RBI), as part of its **strategy to create digital public infrastructure in the country**, has announced that a new technology platform called the Unified Lending Interface (ULI) would be introduced by the Reserve Bank Innovation Hub, Bengaluru which will enable friction-less credit to farmers and MSME borrowers to begin with.*

### **About**

- *The Unified Lending Interface (ULI) is a platform designed by the Reserve Bank of India (RBI) to facilitate **seamless access to credit for individuals and businesses across the country**.*
- *It aims to bring together multiple lending institutions, including banks, non-banking financial companies (NBFCs), and fintech companies, under a single digital interface.*
- *ULI is a part of RBI's broader efforts to promote financial inclusion and enhance the efficiency of the lending ecosystem in India.*

## Objectives

- **Simplify Credit Access:** *ULI seeks to make borrowing easier by providing a unified digital platform where borrowers can access credit from multiple lenders.*
- **Promote Competition:** *By bringing various lenders onto a single platform, ULI aims to enhance competition among them, potentially leading to better loan terms for borrowers.*
- **Reduce Turnaround Time:** *The platform aims to significantly reduce the time taken to process and disburse loans by leveraging technology.*
- **Improve Transparency:** *ULI will provide borrowers with a transparent view of loan options, interest rates, and other terms from different lenders, enabling informed decision-making.*
- **Enhance Financial Inclusion:** *By making credit more accessible, especially to underserved segments of society, ULI contributes to the goal of financial inclusion.*

## Key Features

- **Integration of Lenders:** *ULI integrates various types of lenders, including public and private sector banks, NBFCs, and digital lenders, onto a single platform.*
- **Digital Application Process:** *Borrowers can apply for loans digitally through the ULI, eliminating the need for physical paperwork.*
- **Real-Time Approvals:** *The platform is designed to facilitate real-time loan approvals, leveraging automation and advanced analytics.*
- **Credit Score Integration:** *ULI integrates credit score information, allowing lenders to assess the creditworthiness of borrowers instantly.*
- **Personalized Loan Offers:** *The platform can provide personalized loan offers based on the borrower's credit profile and needs.*
- **Data Security and Privacy:** *ULI ensures robust data security measures to protect the personal and financial information of borrowers.*

## Benefits

- **For Borrowers:**
  - *Easier access to credit with reduced documentation.*
  - *Ability to compare and choose from multiple loan offers.*
  - *Faster loan approval and disbursal process.*
- **For Lenders:**
  - *Expanded reach to potential borrowers across the country.*
  - *Reduced cost of customer acquisition and loan processing.*

- Enhanced ability to assess borrower risk through integrated credit data.
- **For the Economy:**
  - Improved credit penetration, especially in underserved regions.
  - More efficient allocation of financial resources.
  - Contribution to economic growth by supporting entrepreneurship and consumption.

## Challenges

- **Data Privacy Concerns:** With the integration of various lenders and sensitive borrower information, ensuring data privacy and security is paramount.
- **Adoption by Lenders:** The success of ULI depends on widespread adoption by banks and NBFCs, which may require significant changes in their existing systems and processes.
- **Technology Infrastructure:** The platform's effectiveness relies on robust technology infrastructure, which needs to be resilient and scalable to handle large volumes of transactions.

## Future Prospects

- The ULI is expected to play a crucial role in shaping the future of the lending ecosystem in India by making credit more accessible, affordable, and transparent.
- As the platform evolves, it could incorporate additional features such as integration with government schemes, expansion to international markets, and the inclusion of more diverse financial products.

## Conclusion

- The Unified Lending Interface by the RBI represents a significant step towards modernizing the lending process in India.
- It aligns with the government's broader objectives of financial inclusion and digital transformation.
- The success of ULI could set a new benchmark in the global financial landscape, making India a leader in digital credit delivery systems.

## 2G ethanol production

### Syllabus: GS-3; Science and Technology

#### Context

- *To boost ethanol production, Centre moots dedicated enzyme manufacturing*

## About

- *2G Ethanol (Second Generation Ethanol) is biofuel produced from non-food biomass, such as agricultural residues (straw, husks, bagasse), forestry residues, and other lignocellulosic materials.*
- *This distinguishes it from 1G Ethanol (First Generation Ethanol), which is produced from food crops like sugarcane, maize, and corn.*

## Importance of 2G Ethanol in India

- **Energy Security:** Reduces dependency on fossil fuels by providing an alternative, renewable energy source.
- **Environmental Benefits:** Lower greenhouse gas emissions compared to fossil fuels and 1G ethanol. The utilization of agricultural residues reduces air pollution caused by stubble burning.
- **Rural Development:** Creates additional income sources for farmers through the sale of agricultural residues. Boosts the rural economy by generating employment in bio-refinery operations.
- **Waste Management:** Helps in managing agricultural waste effectively, reducing the environmental impact.

## Government Initiatives and Policies

- **National Biofuel Policy (2018):**
  - Aims to achieve 20% ethanol blending with petrol by 2025.
  - Promotes the production of ethanol from lignocellulosic biomass and other non-food feedstocks.
- **Pradhan Mantri JI-VAN Yojana (2019):**
  - Launched to provide financial support for setting up 12 commercial scale 2G ethanol projects.
  - Allocated Rs. 1,968 crore for the period 2018-19 to 2023-24.
- **Ethanol Blended Petrol (EBP) Programme:**
  - Mandates blending of ethanol with petrol to reduce crude oil imports and enhance energy security.
  - Promotes the use of 2G ethanol to achieve the blending targets.
- **SATAT Initiative:**
  - Sustainable Alternative Towards Affordable Transportation (SATAT) encourages the production of Compressed Bio-Gas (CBG) from agricultural

*residues and other waste materials. 2G ethanol production aligns with this initiative as it promotes the use of waste biomass.*

## Current Status and Developments

- **Bio-Refineries:** Several bio-refineries have been set up or are under construction across India to produce 2G ethanol. Notable projects include those by Indian Oil Corporation (IOC), Bharat Petroleum Corporation Limited (BPCL), and Hindustan Petroleum Corporation Limited (HPCL).
- **Public-Private Partnerships:** Collaboration between government entities and private companies to develop and scale up 2G ethanol production.
- **Research & Development:** Indian research institutions like the Indian Institute of Petroleum (IIP) are working on improving the efficiency and cost-effectiveness of 2G ethanol production technologies.

## Challenges in 2G Ethanol Production

- **High Production Costs:** 2G ethanol production is currently more expensive than 1G ethanol and fossil fuels due to the complex processing technology involved.
- **Technological Barriers:** Efficient conversion of lignocellulosic biomass into ethanol is still a challenging task that requires advanced technologies and continuous R&D.
- **Feedstock Availability:** The seasonal availability of agricultural residues and the competition for these residues for other uses, such as fodder and composting, can limit the consistent supply of feedstock for 2G ethanol production.
- **Infrastructure Development:** The need for infrastructure to collect, store, and transport large quantities of agricultural residues.

## Future Prospects

- **Scaling Up Production:** As technologies mature and become more cost-effective, 2G ethanol production is expected to scale up, contributing significantly to India's ethanol blending goals.
- **Policy Support:** Continued government support through subsidies, tax incentives, and favorable policies will be crucial in overcoming economic and technological barriers.
- **Global Leadership:** India has the potential to become a global leader in 2G ethanol production, given its vast agricultural base and the growing focus on sustainable energy solutions.

## Conclusion

- *2G ethanol production represents a crucial step towards sustainable energy in India, offering a solution to multiple challenges, including energy security, environmental sustainability, and rural development.*
- *With continued government support and advancements in technology, 2G ethanol is set to play a significant role in India's energy landscape.*