

03 Oct 2021: UPSC Exam Comprehensive News Analysis

TABLE OF CONTENTS

A. GS 1 Related

B. GS 2 Related

C. GS 3 Related

ECONOMY

1. [Govt. notifies new rules to clear retro tax mess](#)

ENVIRONMENT AND ECOLOGY

1. [A tiny plant that can 'digest' low density plastic sheets](#)

D. GS 4 Related

E. Editorials

HEALTH

1. [What are the concerns of digital health mission?](#)

ENVIRONMENT AND ECOLOGY

1. [Toxic firecrackers](#)

F. Prelims Facts

1. [Future-proofing Langa-Manganiyar heritage](#)
2. [IAO Hanle: A promising astronomical observatory](#)
3. [How beneficial is the new pill to patients with COVID-19](#)
4. [Panel set up to implement Assam Accord](#)

G. Tidbits

1. ['5 cr. houses given water connections'](#)

H. UPSC Prelims Practice Questions

I. UPSC Mains Practice Questions

A. GS 1 Related

Nothing here for today!!!

B. GS 2 Related

Nothing here for today!!!

C. GS 3 Related

Category: ECONOMY

1. Govt. notifies new rules to clear retro tax mess

Context:

- The Union government has notified **new rules under the Income Tax Act** for specifying the process to be followed by affected taxpayers to **settle the retrospective tax disputes**.

Background:

Retrospective tax issue:

For detailed information on this issue refer to the following article:

[UPSC Comprehensive News Analysis of 06th Aug 2021](#)

- Union Finance Minister had recently introduced the **Taxation Laws (Amendment) Bill in the Lok Sabha to nullify the retrospective tax clauses** that were introduced in 2012 and had issued draft rules to resolve the pending tax disputes.
- Affected companies like Cairn Energy had envisaged interest to settle their dispute with the Indian government.

Details:

- The Income-Tax (31st Amendment) Rules, 2021, introduce a new portion pertaining to 'indirect transfer prior to May 28, 2012 of assets situated in India'.
- As per the conditions laid down under this new rules, firms disputing retrospective tax demands will have to **withdraw all legal proceedings** including arbitration, mediation efforts and **waive all rights to claim costs or attach Indian assets** and also **indemnify the government** on costs and liabilities from any action pursued by other interested parties (including shareholders) in future. They would also have to give an undertaking that such initiatives will not be reopened.

Category: ENVIRONMENT AND ECOLOGY

1. A tiny plant that can 'digest' low density plastic sheets

Context:

- Researchers from University of Madras and Presidency College, Chennai, have isolated an **alga that breaks down low density polyethylene**.

Background:

Plastic pollution:

- **Around 5.6 million metric tonnes of plastic waste is generated each year in India. Worryingly, only 60% of the plastic used in India is collected and recycled.** Hence a large

proportion of Plastic waste is continuing to accumulate and leading to adverse environmental impacts.

- The usual means of disposal of plastic waste involves **incineration, land-filling** and recycling. These methods have limitations and also sometimes produce **side-effects that are hazardous to the environment**.
- Hence there has been growing **emphasis on biodegradation methods** that are safe and environment friendly.

Details:

- The alga identified is **microalga Uronema africanum Borge**. This is a species of microalgae that is commonly found in Africa, Asia and Europe.
- The alga used for the study has been harvested from a lake in Chennai.
- The microalga was found to **produce enzymes, hormones, toxins such as cyanotoxins and some polysaccharides** which were able to **slowly degrade polyethylene into monomers** which will not have harmful effect in the atmosphere.
 - Low-density polyethylene is highly resistant to degradation.
- The researchers are planning to collaborate with industry to take up this technology in to a pilot scale and finally large-scale study.

Significance:

- The development gains significance given that the identified algae could be used as an agent of **biodegradation of plastic sheets and thus it offers a solution to Plastic pollution in India**.

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: HEALTH

1. What are the concerns of digital health mission?

Context:

- The launch of the Ayushman Bharat Digital Mission (ABDM).

Details:

- The Ayushman Bharat Digital Mission (ABDM) aims to give every citizen a unique digital health ID and provisions for users to access and link personal records with their unique ID to create a longitudinal health history.
 - The unique health ID will be a randomly generated 14-digit identification number. The ID will give the user unique identification, authentication and will be a repository of all health records of a person.

- The user will also set up a Personal Health Records (PHR) address.

For more detailed information on this topic refer to the following article:

[UPSC Comprehensive News Analysis of 27th Sep 2021](#)

Significance:

- The Digital Ecosystem will enable facilities like digital consultation and hence will facilitate easy, affordable and accessible treatment.
- The new system will not only simplify processes of hospitals but also increase ease of living for the patients.
- The introduction of a unique health identification card at the national level would be a game changer in monitoring, providing and managing healthcare for all citizens. The digital ecosystem provides a more holistic and inclusive model for healthcare in India.
- The meta data could provide valuable insights not only for the government's evidence based policy making but also to insurance companies, international researchers, and pharma companies.

Challenges:

- Data security and privacy of an individual remains a concern with the new system. Despite provisions such as making citizen's consent mandatory for sharing their information, such provisions can be easily manipulated by interested entities.
- The lack of access to technology, poverty and lack of understanding may hamper the mission.
- India's previous experience with respect to similar attempts like the One Nation One Ration card, PM-JAY card, Aadhaar card, etc., had brought to light many issues such as errors. The DHM is also likely to face similar issues.
- Also India faces structural issues like the acute shortage of healthcare professionals and healthcare facilities. The digital health mission will be rendered ineffective without such bare minimum resources.

For more related information refer to the following article:

[UPSC Comprehensive News Analysis of 30th Sep 2021](#)

Category: ENVIRONMENT AND ECOLOGY

1. Toxic firecrackers

Context:

- The Supreme Court has come down heavily on the firecracker industry after revelation from the CBI enquiry pointing to **rampant violation of the SC ban on the use of toxic ingredients in firecrackers.**

For more information on this topic refer to the following article:

[UPSC Comprehensive News Analysis of 29th Sep 2021](#)

Background:

Pollution caused by fire crackers:

- **Firecrackers use different metal salts to get different colours.** Barium compounds produce green light and Strontium and Lithium salts produce red light.
- The burning of firecrackers resulting in **emission of particles and gases** is a major source of **air pollution**. It gives rise to higher levels of Aluminium, Barium, Potassium, Sulphur, Iron and Strontium in the air.
- High levels of such elements in the air **affect the health of people and animals**.

Previous Supreme Court Ruling:

- Given the air and sound pollution caused by fire crackers, there were petitions filed in the judiciary calling for a total ban on firecrackers.
- However taking a balanced view the Supreme Court had ruled out a full ban on firecrackers and issued orders stipulating that **only reduced emission and green crackers be allowed**, with tight restrictions on timings when they could be burst.

Green Crackers:

- The Council of Scientific and Industrial Research, through its **National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur**, had come out with firecrackers that have lower particulate matter emission.
- These crackers are named as **Safe Water Releaser (SWAS- Low Potassium Nitrate and Sulphur use)**, **Safe Thermite Cracker (STAR- low Sulphur and Potassium Nitrate)** and **Safe Minimal Aluminium (SAFAL- Aluminium use is low)**.
- These have the unique property of **releasing water vapour and/or air as dust suppressant and dilutant** for gaseous emissions.

Details:

- The Supreme Court has found six major fireworks manufacturers violating orders requiring them not to use prohibited chemicals such as Barium salts and to label the firecrackers in compliance with the law.
 - The **green crackers are to be identified using unique QR codes**.
- Firecrackers were also not labelled with information on the person responsible for legal compliance, as ordered by the court.
 - The **Petroleum and Explosives Safety Organisation should certify the composition of fireworks as free from banned chemicals**.

F. Prelims Facts

1. Future-proofing Langa-Manganiyar heritage

Langa-Manganiyar folk art:

- The **Langas and Manganiyars are communities of Muslim folk musicians** residing mostly in western **Rajasthan's Jaisalmer and Barmer districts**.

- The folk art practiced by these two communities includes **ballads, folklore and songs**.
- The major theme includes **heroic ballads, romantic epic tales and the Sufi spiritual stories**.
- The performances are in multiple languages and **dialects including Marwari, Sindhi, Saraiki, Dhatti and Thareli**.
- The folk art forms a vital part of Thar desert's cultural landscape.

Context:

- Efforts are on to document and digitize the folk art performances of the Langa-Manganiyar artistes.

2. IAO Hanle: A promising astronomical observatory

- As per a recent study the **Indian Astronomical Observatory (IAO) located at Hanle near Leh in Ladakh** is becoming one of the globally promising observatory site due to the advantages of more clear nights, minimal light pollution, background aerosol concentration, extremely dry atmospheric condition and uninterrupted monsoon.
- It is **among the highest optical telescopes in the world and has optical, infrared and gamma-ray telescopes**.

3. How beneficial is the new pill to patients with COVID-19

Molnupiravir:

- Molnupiravir is an investigational **anti-viral drug for COVID-19** being developed by pharmaceutical major Merck and Ridgeback Biotherapeutics.
- The drug works by **inhibiting the process by which the virus replicates**. It alters critical enzymes that are necessary for the virus to begin replicating in the body's host cells.
- Phase 3 trials of the drug have shown promising results.

Significance:

- Molnupiravir is a pill and hence will **not be required to be administered**
- It would also be **cheaper than the monoclonal antibody therapy**.
- The drug has shown '**consistent efficacy**' across viral variants Gamma, Delta and Mu in those with mild or moderate disease

4. Panel set up to implement Assam Accord

Assam Accord:

- It was a tripartite accord **signed between the Government of India, State Government of Assam and the leaders of the Assam Movement in 1985**.
- The signing of the Accord led to the conclusion of a six-year agitation that was launched by the All Assam Students' Union (AASU) in 1979, **demanding the identification and deportation of illegal immigrants from Assam**.

- Among the many clauses of the accord, clause 6 holds immense value. The **Clause 6 of the Accord** pertains to the constitutional, legislative and administrative safeguards to “protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people”.

Context:

- The Assam government has set up an eight-member sub-committee to examine and prepare a framework for the implementation of all clauses of the Assam Accord of 1985.

G. Tidbits

1. ‘5 cr. houses given water connections’

Jal Jeevan Mission:

- Jal Jeevan Mission, is envisioned to **provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India**.
- The programme will also implement **source sustainability measures** as mandatory elements, such as recharge and reuse through grey water management, water conservation, rain water harvesting.
- The Jal Jeevan Mission will be based on a **community approach to water** and will include extensive Information, Education and communication as a key component of the mission. JJM looks to create a **jan andolan** for water, thereby making it everyone’s priority.

Progress made:

- **Five crore households had been provided with water connections since the launch of the Jal Jeevan Mission in 2019.**
- Also tap water has been reaching every household in about 1.25 lakh villages in about 80 districts of the country. The number of tap connections in the aspirational districts has also registered a notable increase since the launch of the scheme.

New additional measures taken:

- The newly launched **Jal Jeevan Mission app** aims to **improve awareness** among stakeholders and aims for **greater transparency and accountability of schemes** under the Jal Jeevan mission.
- The **Rashtriya Jal Jeevan Kosh** allows any individual, institution or philanthropist within India or abroad to contribute to help provide tap water connections.

H. UPSC Prelims Practice Questions

Q1. Consider the following statements with respect to “Langa & Manganiar”:

1. They are folk artists, famous for their folk dance called “Kalbeliya”.
2. They are Muslim communities predominantly residing in Ladakh.
3. They play a traditional percussion instrument called “Khartal”.

Which of the given statement/s is/are correct?

- a. 1 and 3 only
- b. 2 only
- c. 3 only
- d. 1, 2 and 3

Answer: c

Explanation:

- The Langas and Manganiyars are communities of Muslim folk musicians residing mostly in western Rajasthan's Jaisalmer and Barmer districts.
- The folk art practiced by these two communities includes ballads, folklore and songs.
- The major theme includes heroic ballads, romantic epic tales and the Sufi spiritual stories.
- The performances are in multiple languages and dialects including Marwari, Sindhi, Saraiki, Dhatti and Thareli.
- They play a traditional percussion instrument called "Khartal".

Q2. In which of the following states can Gangetic River dolphins be found?

- 1. Assam
- 2. Uttar Pradesh
- 3. Rajasthan
- 4. Jharkhand
- 5. West Bengal

Options:

- a. 2, 4 and 5 only
- b. 1, 2 and 4 only
- c. 4 and 5 only
- d. 1, 2, 3, 4 and 5

Answer: d

Explanation:

- Ganges river dolphins once lived in the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems of Nepal, India, and Bangladesh. But the species has been declining from most of its early distribution ranges.
- Ganges river dolphins prefer deep waters, in and around the confluence of rivers. The distribution range of the Ganges river dolphins in India covers seven states namely, Assam, Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Jharkhand and West Bengal.

Q3. Uronema africanum Borge, recently seen in news, is:

- a. An alga that can digest low density plastic sheets.
- b. An oil eating bacteria.
- c. A soil fungus, which uses enzymes to rapidly break down plastic materials.
- d. A bacterium that can aid the production of bioplastics.

Answer: a

Explanation:

- Researchers from University of Madras and Presidency College, Chennai, have isolated an alga that breaks down low density polyethylene. The alga identified is microalga Uronema africanum Borge. This is a species of microalgae that is commonly found in Africa, Asia and Europe.
- The alga used for the study has been harvested from a lake in Chennai.
- The microalga was found to produce enzymes, hormones, toxins such as cyanotoxins and some polysaccharides which were able to slowly degrade polyethylene into monomers which will not have harmful effect in the atmosphere.
 - Low-density polyethylene is highly resistant to degradation.

Q4. Which of the given statement/s is/are INCORRECT with respect to The Indian Astronomical Observatory (IAO), located in Hanle in Ladakh:

1. It has one of the world's highest located sites for optical, infrared and gamma-ray telescopes.
2. It houses Asia's largest fully steerable optical telescope.
3. Night observations at IAO Hanle from 2m-Himalayan Chandra Telescope (HCT) are possible throughout the year without any interruption due to monsoon.

Options:

- a. 1 and 3 only
- b. 2 only
- c. 1 and 2 only
- d. None of the above

Answer: b

Explanation:

- As per a recent study the Indian Astronomical Observatory (IAO) located at Hanle near Leh in Ladakh is becoming one of the globally promising observatory site due to the advantages of more clear nights, minimal light pollution, background aerosol concentration, extremely dry atmospheric condition and uninterrupted monsoon.
 - Night observations at IAO Hanle from 2m-Himalayan Chandra Telescope (HCT) are possible throughout the year without any interruption due to monsoon.
- It is among the highest optical telescopes in the world and has optical, infrared and gamma-ray telescopes.

- The 3.6 m optical telescope set up at Devasthal, Uttarakhand is Asia's largest fully steerable optical telescope.

Q5. Which one of the following best describes the term “Merchant Discount Rate” sometimes seen in news? (UPSC-2018)

- a. The incentive given by a bank to a merchant for accepting payments through debit cards pertaining to that bank.
- b. The amount paid back by banks to their customers when they use debit cards for financial transactions for purchasing goods or services.
- c. The charge to a merchant by a bank for accepting payments from his customers through the bank's debit cards.
- d. The incentive given by the Government, to merchants for promoting digital payments by their customers through Point of Sale (PoS) machines and debit cards.

Answer: c

Explanation:

- The merchant discount rate is charged to merchants for processing debit and credit card transactions.
- To accept debit and credit cards, merchants must set up this service and agree to the rate. The merchant discount rate is a fee, typically between 1%-3%, that merchants must consider when managing business costs.

I. UPSC Mains Practice Questions

1. Decision to end retrospective taxation will help the Centre project India as an investor-friendly destination. Comment. (10 Marks, 150 Words)[GS-3, Economy]
2. In the light of negotiations on the proposed FTA talks between India and Australia, liberalizing investment regimes would result in valuable economic benefits for both countries. Discuss. (10 Marks, 150 Words)[GS-2, International Relations]