

# 09 May 2021: UPSC Exam Comprehensive News Analysis

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## I. UPSC Mains Practice Questions

### A. GS 1 Related

#### Category: SOCIAL ISSUES

##### 1. 'Immediate measures needed for welfare of children'

###### Context:

- **The Supreme Court Juvenile Justice Committee**, in coordination with **UNICEF** has highlighted the need to urgently provide care and protect children suddenly made vulnerable by the loss of one or both parents to the second wave of COVID-19.

###### Background:

- The Supreme Court has been nudging the Centre to prepare for the **third wave of the pandemic**.
- Recently, a Bench led by Justice D.Y. Chandrachud had highlighted reports that children **would be affected in the third wave**.

###### Details:

- The Juvenile Justice Committee has noted the need for concerted efforts to provide **interim care for children who have been orphaned, abandoned or even left unaccompanied in their own homes**.

###### Recommendations:

- Setting up of **State-level nodal officers and a district task force** for rapid response for the care and protection of such children.
- **Sponsorship for children** who had lost parent/s or bread-earners or were facing economic hardship.
- Clear guidance has to be published on steps to be taken in the event when such children in an extremely vulnerable state had been exposed to the virus or showed symptoms of infection. **Care measures for their isolation and treatment** needed to be stepped up.
- **Childcare institutions should be declared "essential services"**.
- The caregivers and employees of childcare institutions — both government and private — should be vaccinated as frontline professionals.
- The state should focus on ensuring heightened medical watch for children in institutional care.

### B. GS 2 Related

#### Category: INTERNATIONAL RELATIONS

##### 1. E.U., India relaunch FTA talks, sign connectivity partnership

###### Context:

- **E.U.-India leaders virtual meeting.**
  - 27 European leaders had gathered in Porto, Portugal

Details:

**Free trade agreement:**

- India and the European Union have agreed to relaunch free trade negotiations by resuming talks on the **Bilateral Trade and Investment Agreement (BTIA)**.
  - The talks had begun in 2007, and stalled in 2013, over differences on issues like market access issues, and tariffs by India on products like wine, dairy and automotive parts, as well as E.U. resistance over visas for Indian professionals.
- India and the E.U. have agreed to work towards a **balanced, comprehensive and mutually beneficial trade agreement**.
- They would also launch negotiations for a **stand-alone investment protection agreement** and a **separate agreement on “geographical indications”** pertaining to intellectual property rights.
  - India had in 2015 scrapped all **Bilateral Investment Treaties (BITs)**. This has posed hurdles for new E.U. investments in India.
- The relaunched talks would be steered by the recently set up High-Level dialogue between Indian Commerce Minister and his counterpart, EU Trade Commissioner.
- The relaunch of free trade talks holds immense significance given the timing of the talks which comes as the **U.’s negotiations with China on their Comprehensive Agreement on Investment (CAI)** have run into trouble.

**Connectivity partnership:**

- **The India-E.U. connectivity partnership** has committed the two sides to work together on **digital, energy, transport, people to people connectivity** that was transparent, viable, inclusive, sustainable, comprehensive, with a rules-based approach.
- The Connectivity Partnership document outlines plans to cooperate on **digital and infrastructure projects**.
- The partnership is seen as a response to China’s Belt and Road Initiative.

**COVID related talks:**

- The meeting also discussed **COVID recovery plans and vaccine cooperation**.

**Temporary waiver for TRIPS:**

- India has failed to secure the support of the European leaders for its proposal at the World Trade Organisation for patent waivers for COVID vaccine.
  - The support of a major bloc like the E.U. is crucial to passing the resolution at the WTO by consensus.

## C. GS 3 Related

### Category: SCIENCE AND TECHNOLOGY

## 1. Anti-COVID-19 drug developed by DRDO gets emergency use nod

### Context:

- **Drugs Controller General of India (DCGI) has granted permission for emergency use** of an anti-COVID-19 therapeutic application of the **2-deoxy-D-glucose (2-DG)**

### Details:

- The order allows for emergency use of the drug as adjunct therapy in moderate to severe COVID-19 patients.
- The drug comes in powder form in sachets and is taken orally by dissolving it in water.
- **It selectively accumulates in virally infected cells and prevents their growth by stopping viral synthesis and energy production.**
- The drug has been developed by the **Institute of Nuclear Medicine and Allied Sciences (INMAS)** in collaboration with Dr. Reddy's Laboratories, Hyderabad.
  - INMAS is a lab of the Defence Research and Development Organisation (DRDO).

### Significance:

- Clinical trial results have shown that this drug helps in **faster recovery of hospitalised patients and reduces supplemental oxygen dependence**. This will help ease the acute bed shortage and also help reduce medical oxygen demand to a great extent.
- The drug being a **generic molecule and analogue of glucose**, it can be easily produced and made available in plenty in the country.

## Category: ECONOMY

## 1. Hope soars as Second World War airport in Assam takes commercial wings

### Context:

- **Rupsi airport** near Gauripur, about 15 km from district headquarters Dhubri has been re-opened for commercial flights under the subsidised **UDAAN scheme for regional connectivity**.
  - Rupsi is Assam's 7th airport and 15th in the northeast including Pakyong in Sikkim.

### History of the airport:

- The airport was built for warplanes in 1939.
- It was one of South Asia's largest airports at that time and was **used by Allied aircraft** for supplying arms, manpower and ammunition to forces in Burma and China during World War II.
- India's Partition in 1947 began eroding the airport's importance. It has been out of use since 1983.
- **Gauripur near Dhubri** also lost its importance as the regional communication hub soon after Independence.
  - Dhubri used to be the gateway to the northeast during the British area. It was a **strategic river port (the Brahmaputra flows by Dhubri town)** and an important stop on the pre-1947 railway line.

- The river port was closed after the **India-Pakistan war in 1965** and the railway service suspended in 1988.

**Significance:**

- **Regional connectivity** is set to improve in the western part of the State of Assam.
- Rupsi is vital not only for western Assam. It could also cater to the people of western Meghalaya, Cooch Behar and Alipurduar districts of West Bengal and south-western Bhutan, besides fuelling small-scale industries.

**Other interventions with respect to infrastructure in the region:**

- Railway service to Dhubri was resumed in 2011 after gauge conversion.
- The river port at **Free India Ghat (Dhubri town)** was revamped in 2018. This could help incentivize regular inland water service via Bangladesh which can ensure **significant economic and social benefits for the region.**

**Category: ENVIRONMENT AND ECOLOGY**

**1. Wildlife forensics helps cause of pangolins**

**Context:**

- Researchers of **Zoological Survey of India (ZSI)**, Kolkata, have developed tools based on wildlife forensics that could help differentiate between the scales of Indian pangolin (*Manis crassicaudata*) and Chinese pangolin (*Manis pentadactyla*).

**Background:**

**Threat to pangolins:**

- **Pangolins are the world's most trafficked mammal.** The demand for its scales in the making of traditional East Asian medicines has fuelled its trade.
- Studies have shown that between 2000 and 2019, an estimate of about 8,95,000 pangolins was trafficked globally, which mainly involved Asian and African pangolins. This has led to a **drastic decline of the species.**
- The population of Chinese pangolins is limited as it has a limited geographical range, **low fecundity** with just one offspring a year. It is also facing pressure due to **habitat degradation** and is prone to local extinction.

**Conservation status:**

- According to the International Union for Conservation of Nature, **Indian pangolins are endangered and the Chinese pangolins are critically endangered.**
- Pangolins are listed in **Schedule I of Wildlife (Protection) Act, 1972.**

**Significance:**

- The new methodology by **helping identify species** and the number of individuals poached in seizures, could **help track the decline of the species.**

## D. GS 4 Related

*Nothing here for today!!!*

## E. Editorials

### Category: SCIENCE AND TECHNOLOGY

#### 1. IP rights and vaccines

##### Context:

- The U.S. Trade Representative has announced that the **Biden administration would support waiving trade-related aspects of intellectual property rights (TRIPS)** for the production of COVID-19 vaccines.

##### Background:

##### **Pandemic in developing world:**

- There has been a **sharp surge in COVID-19 cases in India and Brazil.**
- The Indian variant, believed to be driving a second wave in India could potentially fuel second or third waves across the world, causing a setback to the progress made in controlling transmission across the U.S. and EU. Additionally, the Brazil and South African variants still pose a threat in some pockets.
- Across many affected nations, **vaccine availability has emerged as a bottleneck impeding progress in the fight against the pandemic.**
- Thus there have been calls for ensuring **global-vaccine-access** and the TRIPS waiver is expected to rapidly increasing vaccine availability across the world.

##### Concerns:

- Though the proposed waiver of intellectual property rights aimed at ensuring a wider production base globally would no doubt help ramp up global production of vaccines, several caveats remain.

##### **Issues with processes:**

- There could be serious issues associated with manufacturing vaccines.
- For example, for vaccines based on **messenger RNA (mRNA) technology**, just an easing of the associated intellectual property rights rules without further support like tech transfer to generic pharmaceutical firms in countries such as India and South Africa would render the waiver useless. This is because a **“tech transfer” is also needed for new pharma companies** to actually commence production, especially for mRNA vaccines, as they **use highly specialised manufacturing equipment.**

##### **Time needed to set up new units:**

- A considerable amount of time, even **several years could be needed for generic producers’ plants to become operational at optimal capacity and produce vaccines.**

- This could be a big challenge given the doubts being expressed by some experts that today's vaccines may not even be relevant at that point in time, especially if **new variants** prove resistant to vaccine formulations currently available.

#### **Financial viability of pharma sector:**

- The patent relaxations could **discourage pharmaceutical companies from investing in producing next-generation vaccines.**

#### **Recommendations:**

- In parallel to the waivers, a **transfer of personnel, raw materials and equipment to developing nations** will be necessary to ensure increase in global vaccine production.
- The decision to waive all TRIPS rules should be preceded by a **rigorous analysis of the effects such a policy would have on the biotechnology sector** and global supply chains for its products.

For more information on this issue refer to:

[UPSC Comprehensive News Analysis 07th May 2021](#)

### **Category: HEALTH**

#### **1. Use of CT scans and steroids for COVID-19**

##### **Context:**

- **Unwarranted use of CT scans and steroids** in the treatment of COVID-19.

##### **Background:**

##### **Usefulness of CT scans for COVID-19 patients:**

- CT scans can help in **diagnosis and prognosis of COVID-19 disease.**
  - It can help in detecting COVID-19 in patients with a negative RT-PCR test but COVID like symptoms.
  - It can help gauge the severity of the infection and plan treatment accordingly.
- A chest CT can be useful in evaluating patients with moderate or severe disease, to **identify complications like thromboembolism or pneumomediastinum.**
  - Thromboembolism is the formation of a clot (thrombus) in the blood vessels that breaks loose and is carried by the blood stream to plug another vessel.
  - Pneumomediastinum is the abnormal presence of air or another gas in the mediastinum. The mediastinum is the center of the chest and is located between the lungs.
- CT appearance might give a clue towards a diagnosis of dangerous COVID-19-associated **fungal super-infections like aspergillosis or mucormycosis.**

##### **Use of steroids for COVID-19 patients:**

- In many patients, death occurs following a **hyper-immune response (cytokine storm)** to the SARS-CoV-2 virus, which damages the lungs and other organs, leading to multi-organ dysfunction syndrome.
- **Corticosteroids like dexamethasone (anti-inflammatory drug)** work by calming down the immune system and preventing the progression of organ damage.
- Steroids can prevent the immune system from unleashing the cytokine storm. It is primarily used for patients with moderate and severe infection.
- International agencies like the WHO have recommended the use of corticosteroids like dexamethasone for the treatment of COVID-19, following the **K.'s RECOVERY Trial**, which found mortality benefit for patients who received steroids.

### Concerns:

#### Use of CT scans:

- Doctors have cautioned against the use of CT scans indiscriminately to diagnose the disease, especially in the early stages or in patients with mild symptoms.
- CT scans **exposes individuals to unnecessary radiation**, which could be harmful in the long run. A single CT scan is equal to 300 X-rays, which may increase the **risk of cancer later in life for young people**.

For more information on this topic refer to:

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

#### Use of steroids:

- Doctors and the World Health Organization (WHO) are cautioning against the use of corticosteroids for patients who have non-severe COVID-19. Steroids can turn out to be harmful if the dosage, timing or duration of the drug goes wrong.
  - Use of steroids too early in the illness when viral replication is happening might **interfere with the immune system's natural ability to fight back**.
  - There have been reports of many mild COVID-19 cases where steroids had **stimulated viral replication, causing oxygen levels to drop**.
  - There is potential harm associated with the long-term use of steroids in a serious COVID-19 patient. This includes a **rise in blood glucose levels**, which will need to be carefully managed with insulin to prevent secondary bacterial or fungal infections.

### Conclusion:

- Although CT does offer some insights into the level of infection and other associated threats, its routine use is not recommended. When indicated, **a chest CT should be performed with a low-dose, single-phase protocol** using fast scanning techniques to minimise motion artifacts (patient movement leading to subtle errors).
- Steroids are not mandated for all patients and certainly not for mild patients in the early stages of the illness. There has to be clear cut **guidelines for determining the timing, dosage and duration of steroids usage for patients** with moderate and severe symptoms.



## Category: POLITY AND GOVERNANCE

### 1. The SC ruling on identifying backward classes

#### Context:

- Supreme Court judgment on the **Maratha reservation issue**.
- While holding the Maratha reservation unconstitutional, the Constitution Bench of the Supreme Court also dealt with the issue of the 102nd Constitution Amendment.

This issue has been discussed previously in the following article:

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

#### Background:

##### 102nd Constitutional Amendment:

- The Amendment established a **National Commission for Backward Classes** by adding **Article 338B** to the Constitution.
  - The **five-member Commission** was tasked with monitoring safeguards provided for socially and educationally backward classes (SEBCs), giving advice on their socio-economic development, inquiring into complaints and making recommendations, among other functions.
  - The Centre and the States shall consult the Commission on all policy matters concerning the SEBCs.
- The Amendment added **Article 342A**, under which the **President shall notify a list of SEBCs in relation to each State and Union Territory**, in consultation with Governors of the respective States. Once this 'Central List' is notified, **only Parliament could make inclusions or exclusions in the list by law**.

#### Judicial scrutiny:

- The Supreme Court was undertaking judicial scrutiny of the 102<sup>nd</sup> amendment due to the following reasons
  - A writ petition was filed in the Supreme Court questioning the validity of the Amendment as it **violated the federal structure and deprived the States of their powers**.
  - Also the reservation for the Maratha community was challenged in the judiciary. One of the grounds was that the Act creating the Maratha quota through a new category called 'SEBC' was unconstitutional because after the introduction of the 102nd Amendment, the **State legislature had no power to identify any new backward class**.

#### Details:

- The constitutional bench has ruled that after the passage of the 102nd Constitution Amendment Act in 2018, the **States do not have any power to identify 'socially and educationally backward' (SEBC) classes**.

- The Court interpreting the bare text of the Amendment has held that only the President can publish a list of backward classes in relation to each State and that only Parliament can make inclusions or exclusions in it.
- The Supreme Court has directed the **Centre to notify the list of SEBCs for each State and Union territory**, and until it is done, the present State Lists may continue to be in use.

#### Central government's stand:

- In the midst of arguments that the State government's role in identifying backward classes had been denuded by the 102<sup>nd</sup> Amendment, the Union government has argued that the Parliament's intent was only to create a Central List that would be applied only in the Central government and its institutions.
- It had nothing to do with the State Lists of backward classes or the State governments' powers to declare a community backward.

## F. Prelims Facts

### 1. Probe into digging, construction activities in Kaziranga

- The authorities in Assam's Golaghat and Nagaon districts have begun probing cases of clearance of forest land, digging and construction activities on at least three animal corridors within the **eco-sensitive zone of the Kaziranga National Park and Tiger Reserve**.
- These activities if found true would be in violation of the Supreme Court's order which had noted that no new construction shall be permitted on private lands which form part of the nine identified animal corridors.
- The Kaziranga tiger reserve has **nine identified animal corridors**.
  - Amguri, Bagori, Chirang, Deosur, Harmati, Hatidandi, Kanchanjuri, Haldibari and Panbari corridors.
- These corridors are **crucial for the rhinos, elephants, tigers, deer and other animals that escape a flooded Kaziranga during the monsoon months** for the safety of the hills of Karbi Anglong district.

## G. Tidbits

### 1. Efficient drug delivery

- University of Amherst researchers have engineered a **nanoparticle** that has the potential to change the way diseases including cancer are being treated.
- The process uses **PACs or protein-antibody conjugates** to manage the delivery of the drug to the cancer cell.
  - Protein-antibody conjugates (PACs) are used for antibody-directed delivery of protein therapeutics to specific cells. PACs have the potential to judiciously combine the **merits of two prolific therapeutic approaches, viz. biologics and antibody-drug conjugates**.
- It ensures the **precise and effective deliver of drugs** to specific cancerous cells.

## 2. Cleansing flashes

- A new research has found that discharges that accompany lightning bolts produce large amounts of the **hydroxyl radical**.
- This serves to **break up the green house gas methane** in the atmosphere.

## H. UPSC Prelims Practice Questions

**Q1. The Central Authorities are responsible for which of the following?**

1. Manufacture, sale and distribution of Drugs.
2. Approval of New Drugs.
3. Clinical Trials in the country.
4. Laying down the standards for Drugs.
5. Control over the quality of imported Drugs.

**Options:**

- a. 1, 2, 3 & 5
- b. 1, 3, 4 & 5
- c. 2, 3, 4 & 5
- d. All of the Above

**Answer: c**

**Explanation:**

- The central authorities are not involved in the manufacture, sale and distribution of drugs.
- Central authorities like the Drugs Controller General of India (DCGI) approve new drugs, lay down standards for drugs and help regulate the quality of imported drugs.

**Q2. Arnesh Kumar judgment is related to which of the following?**

- a. Defection of legislators
- b. Shortage of oxygen in the hospitals
- c. Guidelines related to arrests
- d. Euthanasia

**Answer: c**

**Explanation:**

- Arnesh Kumar v. the State of Bihar is a landmark judgment, which was pronounced by the Apex Court imposing checks and balances on the powers of the police before an arrest.

- The judgment had laid guidelines related to arrests holding that arrests should be an exception in cases where the offences are punishable with less than 7 years imprisonment.

**Q3. Match the following:**

- |                                |                 |
|--------------------------------|-----------------|
| 1. Keibul Lamjao National Park | A) Manipur      |
| 2. Kaziranga National Park     | B) Chhattisgarh |
| 3. Kanger Valley National Park | C) Assam        |
| 4. Bandipur National Park      | D) Karnataka    |

**Select the correct option from below:**

- 1-A, 2-C, 3-B, 4-D
- 1-A, 2-B, 3-C, 4-D
- 1-D, 2-C, 3-B, 4-A
- 1-B, 2-C, 3-A, 4-D

**Answer: a**

**Explanation:**

- Keibul Lamjao National Park- Manipur
- Kaziranga National Park- Assam
- Kanger Valley National Park- Chhattisgarh
- Bandipur National Park- Karnataka

**Q4. Consider the following countries/organisations:**

1. Association of Southeast Asian Nations (ASEAN)
2. South Korea
3. Japan
4. Sri Lanka

**Select the correct options India has Free Trade Agreements (FTAs) with:**

- Only 1
- Only 1 & 2
- Only 1, 2 & 3
- All of the Above

**Answer: d**

**Explanation:**

- India's first bilateral FTA with Sri Lanka (ISFTA) came into effect in March 2000.

- India has a FTA with South Korea, Japan and ASEAN as well.

**Q5. The function of heavy water in a nuclear reactor is to**

- a. Slow down the speed of neutrons
- b. Increase the speed of neutrons
- c. Cool down the reactor
- d. Stop the nuclear reaction

**Answer: a**

**Explanation:**

- Moderator is required in a Nuclear reactor to slow down the neutrons produced during the fission reaction so that the chain reaction can be sustained.
- Heavy Water is an excellent moderator due to its high moderating ratio and low absorption cross section for neutrons.

## I. UPSC Mains Practice Questions

1. What is the Role of CT scan in diagnosis of COVID-19? Discuss the potential risks associated with excessive use of scanning. (10 Marks, 150 Words)[GS-2,Health]
2. Explain the recent Supreme Court ruling on the 102nd Constitutional Amendment with respect to identifying 'Socially and Educationally Backward' Classes (SEBC). Will it deprive State governments of their power to identify SEBCs? Evaluate. (15 Marks, 250 Words)[GS-2,Polity and Governance]